

MOTOR TREND

The Magazine for a Motoring World

TECHNOLOGY DEPT.



APRIL 1952 25c

This Issue—Two Road Tests!

**YMOUTH 6
ONTIAC 8**

Research Gives You Facts!

MCRI 112-26-30 FEB 53
TECHNOLOGY DEPARTMENT
DETROIT PUBLIC LIBRARY
196 PUTNAM AVE.
DETROIT 24
MICH.

DETROIT PUBLIC LIBRARY

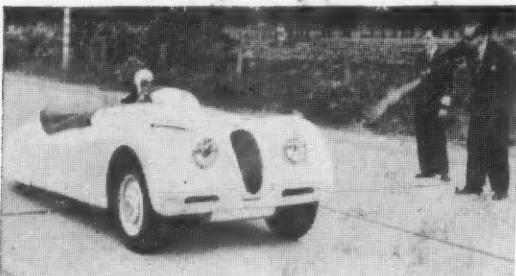
DETROIT

Less than \$1000!

**This Fiberglas Sport Custom
Can Be Yours**

—Page 17

SOME OUTSTANDING VICTORIES AND ACHIEVEMENTS



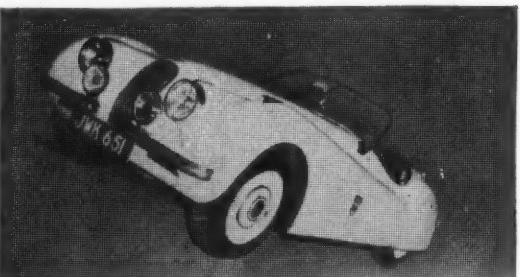
JABBEKE (BELGIUM) 1949 (132·6 m.p.h.—flying mile)



ALPINE TRIAL, 1950—1951



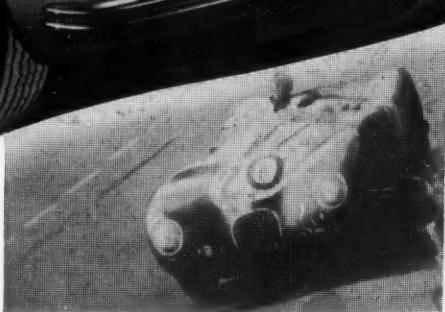
SILVERSTONE 1949—1951



MONTLHERY 1950—107 m.p.h. for 24 hours
1951—131·8 miles in 1 hour



R.A.C. TOURIST TROPHY (N. Ireland) 1950—1951



LE MANS, 1951

THE FASTEST PRODUCTION SPORTS CAR IN THE WORLD

JAGUAR
XK SUPER SPORTS

Write for details to Distributors for States West of Mississippi: Charles H. Hornburg, Jr., 9176 Sunset Boulevard, Los Angeles; Eastern States: The Hoffman Motor Car Co., Inc., 487 Park Avenue, New York 22, and at Esquire Building, South Water Street, New York.

HOW'S YOUR DRIVING, MISTER?

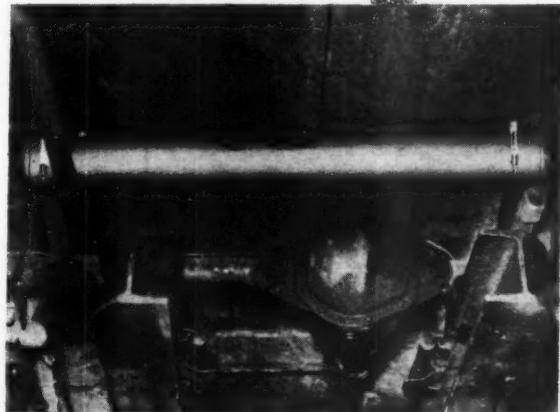
Is it safer, more skillful than
the racing pros'—TROY
RUTTMAN, WALT FAULKNER,
JOHNNY MANTZ?

FOR the Records... the boys who take chances in the speed world DON'T take unnecessary chances. That's why these great professionals swear by GYRO-SKID CONTROL to help them take the turns safer and faster!

NOW, you're not interested in swinging the corner at Elm and Main at 100 mph...but remember, the family sedan can skid at 20 mph, you can lose traction on ice or snow at any speed, a tire can blow at the most awkward moment...

SAFETY is a vital concern to professional experts; it's just as vital to the amateur in his daily routine driving.

AND THE EXTRA MEASURE IS GYRO-SKID CONTROL!



HERE'S THE PRICE \$39.95

Here's what it does:

CONTROLS SKIDS . . . by maintaining equal weight distribution for counter centrifugal force.

MAINTAINS TRACTION . . . through its autonomous action which adds displaced pound pressure to road surface.

INSURES CURVE CONTROL . . . by acting as a counter curve gyroscopically.

*** AND IN CASE OF A BLOW-OUT—the gyroscopic action of GYRO-SKID CONTROL adds displaced weight due to blow.**

GYRO-SKID CONTROL is simple to install (a matter of minutes) . . . it's guaranteed for the life of your car . . . it's the greatest economy move you can make in '52 (for it prolongs the life of your tires, saves wear and tear on the car from road shock and vibration, and outlaws skid accidents and liabilities) . . . And by way of a real PLUS VALUE, it gives your car an easier and more comfortable ride! THIS IS CALIFORNIA'S GREATEST CONTRIBUTION TO AUTOMOTIVE SAFETY.

**BUY IT IN SOUTHERN CALIFORNIA:
BARON'S ENGINEERING
4916 Venice Blvd., Los Angeles 19, California**

Your Orders and Inquiries Will Receive Immediate and Complete Attention!

Power

the HARMAN & COLLINS WAY

• Tested . . .

Precision tested with the very finest and most modern equipment, Harman & Collins cams are each ground to perfection.

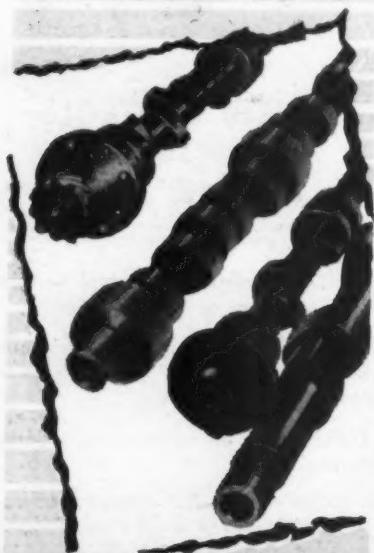
• Proven . . .

Proven on the road, tracks, lakes & on the water by thousands each year, the Harman & Collins cam consistently proves itself a leader in quality & precision grind.

• Guaranteed . . .

The name Harman & Collins automatically assures you of what you are looking for. Whatever your cam need, whichever grind you require—you can depend on a Harman & Collins product.

—Write for Free Information—



HARMAN
and
COLLINS

5552 ALHAMBRA AVENUE
LOS ANGELES 32, CALIFORNIA
Capitol 4610

MOTOR TREND

THE MAGAZINE FOR A MOToring WORLD

APRIL 1952

Published Monthly



VOL. 4 • No. 4

Publishers • ROBERT R. LINDSAY, R. E. PETERSEN

Editorial Direction • WALTER A. WORON

Editor • GRIFFITH BORGESON

Art Director • ALBERT H. ISAACS

CONTENTS

FEATURES:

DEALER'S DOLDRUMS.....	by Charles D. Harrington—14
"Beware of the used-car business" is a slogan that applies to dealers as well as customers	
KAISER MEETS CALF.....	16
Custom interior looks like a Texas fantasy in haircalf and silver	
SKORPION.....	by Eugene Jaderquist—17
Picture report on a Fiberglas body kit intended for the low-income enthusiast	
1952 PLYMOUTH MOTOR TRIAL.....	by MT Research—20
For honest construction, general utility the new Plymouth ranks right near the top	
GEMS.....	22
Two Chevrolets have been given the full Oldsmobile treatment by the little-known but capable Cerny brothers	
FERRARI.....	by Michael Brown—24
A powerful Italian V12 has stunned the rest of the world with its performance	
1952 PONTIAC MOTOR TRIAL.....	by MT Research—28
Dual-range Hydra-Matic enables the staid Pontiac to get out and run with the fleet	
. . . THROUGH A GLASS, DARKLY.....	30
These Fords may not be in anybody's future	

DEPARTMENTS:

AND SO TO PRESS.....	The Editors—5
READER REFLECTIONS.....	6
SPOTLIGHT ON DETROIT.....	by Harry Cushing—10
YOUR EDITOR SAYS.....	12
ACCESSORY TRIAL—GYRO SKID CONTROL.....	by Fred Bedley—33
CUSTOM CURRENTS.....	by Walt Woron—36
INTERNATIONAL NEWSLETTER.....	by Jack Campbell—38
SELL 'N' SWAP.....	46
TRADE TOPICS.....	by Rollin Mack—50

Associate Editor • EUGENE JADERQUIST
Detroit Editor • HARRY CUSHING
Technical Editor • FRED BOEDLEY
Art Production • DON FELL, BRYCE GILLESPIE, JACK PRESTON, GEORGE WALLACE
Staff Photography • AL PALOCZY, ERIC RICKMAN, FELIX ZELENKA, BILL HARKINS
Advertising Manager • ROLLIN MACK

Production Manager • JAMES E. POTTER
New York Editor • JOHN BENTLEY
Cartoon Editor • TOM MEDLEY
Circulation Manager • GORDON BEHN

MOTOR TREND, U. S. Copyright 1952 by Trend, Inc., 5959 Hollywood Blvd., Los Angeles 28, California. Phone Hudson 2-3261. Entered as Second Class Matter at the post office at Los Angeles, California.

SUBSCRIPTION RATE: \$3.00 per year throughout the world. Two years—\$5.00. Single copy 25¢. On sale at newsstands throughout the country.

CHANGE OF ADDRESS: Three weeks' notice is required. When requesting a change, please name magazine and either furnish an address imprint from a recent issue, or state exactly how label is addressed. Change cannot be made without the old as well as the new address.

ADVERTISING: Advertising Sales Mgr.—Rollin Mack, 5959 Hollywood Blvd., Los Angeles 28, California. Eastern Advertising—Harry Cushing, 2437 Book Bldg., Detroit 26, Michigan. Phone Woodward 34443; New York Office—480 Lexington Avenue, New York 17, N.Y. Phone El Dorado 32085. Closes 40 days preceding publication date. (See SRDS)

CONTRIBUTIONS: Manuscripts, photographs, and drawings not returned unless accompanied by self-addressed, stamped envelope. No responsibility assumed for unsolicited material. Printed in U.S.A. by Pacific Press, Inc., Los Angeles, California.

... and so to press

NEXT MONTH'S issue of MOTOR TREND should really be a mine of information for every stock car owner and for everyone contemplating the purchase of a 1952 automobile. A good chunk of the magazine will be devoted to an analysis of ALL American production cars which will arm you with facts never before made available to the consuming public. This many-page feature will be highly revealing and plenty controversial—DON'T MISS IT!

★ ★ ★

The Engineering Award study published in our February issue is still bringing in bales of mail, by and large consisting of very intelligent, well-thought-out letters.

A small percentage of writers thought the Award story was the greatest thing that ever happened in an automotive magazine. Over 90 per cent of the letters began something like this, "The comparison of '51 cars was wonderful but I think it would be even better if you would . . ." and then modifications to the table were suggested.

There were many complaints over the omission of Chevrolet, Plymouth, and a few other cars from the table. During '52 we will do our utmost to test every American production car so that next year's table can be truly complete. We won't bother you here with a detailed rundown on the many suggested modifications to the Engineering Award study but we do want you to know that whether you're an engineer or just an average car owner we welcome your ideas for the improvement of this very important public service. Each suggestion will be given the most serious consideration before next year's award is made.

★ ★ ★

As these lines are being written, our star writer Gene Jaderquist is back at Daytona covering NASCAR's thrill-packed National Speed Week. Gene's job there is to get the story of the meaning of this event for you, the American car owner. See May's MOTOR TREND for the scoop on the biggest stock car competition of them all.

★ ★ ★

Here we go, asking for your ideas again: you'll note a safety check list in each of the Motor Trials in this issue. We know that the list does not cover all important safety points and ask that you let us know what features you want evaluated for safety in future Motor Trials. These suggestions really mean a lot to us and your own idea may save many lives.

★ ★ ★

"What's Your Idea?"—in its old form—has been discontinued, but useful car kinks sent in by readers will be presented from time to time in a new, more attractive way. We're still eager to receive contributions of this sort, but they should be

illustrated or should lend themselves to illustration.

And while speaking of contributions, let's hear from more free-lance photographers who are interested in shooting custom and re-styled cars in their parts of the country. We pay a good rate for photos of good quality.

"Overseas Newsletter" has been discontinued, but frequent features on outstanding foreign cars—like "Ferrari" in this issue—will take its place. "International Newsletter," written this month by Jack Campbell, will bring you behind-the-scene tips, gossip, and late news from speed, power, custom, and accessory shops all over the country, as well as overseas notes that we think will interest you.

★ ★ ★

After three years of service as advertising director of Trend, Inc., Floyd Wheeler has resigned to accept a similar position with the Southern California Muffler Co. of Los Angeles. Beginning with Trend, Inc., when Hot Rod was the sole publication, Wheeler served as advertising manager of that publication, and when MOTOR TREND, CYCLE and AUTO were added to the roster of Trend magazines, he assumed the position of advertising director of all four magazines. Your editor joins the publishers in wishing "Wheel" every success in his new undertaking.

★ ★ ★

Drive, fly, walk, or hitch, but try to be in Sebring, Fla. on March 15. The 12-hour, Le Mans-type endurance race to be held then promises to be one of the most exciting and significant automotive competitions held in this country since decades ago, when the best European equipment used to turn out in force for the Indianapolis 500. Under the skilled management of our old friend Alec Ulmann, this AAA-FIA-sanctioned race is attracting entries from both hemispheres. There you'll be able to see Ferraris, Cunninghams, Oscas, D-Bs, Giaurs, XK-120Cs, Aston-Martins, and Allards. This will be one of the top American sporting events in a great many years.

★ ★ ★

Automotive sport has taken another step ahead in the Midwest, with the opening of that region's first (to our knowledge) paved timing strip. If you live in the Chicago area and want to find out what your stock or modified car will do, you can do it legally, safely, and off the streets at Half Day Speedway, 5150 N. Western Ave., Chicago 25. The phone number there is LO 1-9195.

The Midwest's car-conscious public will have plenty to keep it busy in the near future. The Cincinnati Custom Car Show will be staged at the Music Hall from April 19 through April 27 (revised dates). May 1 through 4 Jim Rathmann will present his Second Annual Motorcade of

(Continued on page thirteen)



NOW!
a new
Electric
TACHOMETER
from
Stewart-Warner

Specially Designed for
Hot Rod and Custom
Car Enthusiasts!

Shows Speeds to 8000 R.P.M.

Now—with simplified, positive action Electric Drive—this new, better Tachometer assures greater efficiency, accuracy, dependability. Large size dial face with 270° pointer travel brings greater visibility. Illuminated for night driving. Readings are accurate regardless of temperature or speed of acceleration. Minimum "over-run." Easily installed! Electric speedometer (0-160 m.p.h.) available in matching case. See them at your local dealer's. Or write:

STEWART-WARNER

Instrument Division, Dept. W-4
1840 Diversey Parkway, Chicago 14, Ill.

AUTO RACING BOOKS

SCIENCE et VIE (Printed in French).....	\$1.75
Racing & sports cars, motorcycles. Photos & spec's of 93 makes of 1951 cars. Even if you don't read French this book is well worth the money.	
ROAD TESTS OF 1951 CARS.....	\$1.50
Just published by "The Motor" magazine this volume is a compilation of all cars tested throughout the year. It gives accurate, thorough & unbiased road tests of British, American, French, German & Italian cars.	
THE HIGH-SPEED INTERNAL COMBUSTION ENGINE by Ricardo.....	\$8.50
The designer's Bible. Thorough coverage. Revised.	
BRITISH SPORTS CARS.....	\$3.00
Details of Sports Cars from 1900 to date. Revised.	
CONTINENTAL SPORTS CARS.....	\$3.00
By an expert. Full coverage. Many photos and data.	
RACING A SPORTS CAR.....	\$3.00
Will greatly benefit both the novice and expert.	
HOW TO DRAW CARS.....	\$1.50
Can help improve your dream car doodles.	
MAINTAINING THE BREED.....	\$3.50
Story of M.G. racing cars. Valuable reference book.	
A MUST for every M.G. owner or racing enthusiast.	
MAGIC MPH by Goldie Gardner.....	\$4.50
Another book of M.G. exploits by the man best able to describe them from first hand information.	
ETTORE BUGATTI.....	\$3.00
Intimate biography of the one and only Bugatti.	
MAGIC OF A NAME—Story of Rolls-Royce \$6.00	
An inspiring account of the car and its founders.	
THE MOTOR VEHICLE, Newton & Steeds....\$8.50	
Up-to-date book on current design practice. Covers all aspects from wheel to engine. GOOD.	
DUESENBERG—Mightiest Car in America....\$5.00	
A book 8½" x 11" in size, 165 pages; over 225 photos of cars and 50 drawings of mechanical details.	
THE AMERICAN ROLLS-ROYCE.....	\$5.00
Companion to Duesenberg book. Catalog reprints, mechanical details. 100 photos & 60 drawings.	
MODERN AUTO DESIGN by Pomeroy.....	\$3.00
Engineering analysis of today's technical trends.	
500cc RACING by Gregor Grant.....	\$3.00
THE BOOK for amateur builders of small race cars.	
AVERAGE SPEED CALCULATOR, \$3	
Average Speed, Time or Distance read directly on face of 5½" diameter celluloid scale. A must for Rallies & Reliability Runs with cars or motorcycles.	
DEALER INQUIRIES INVITED.	
SUBSCRIPTIONS TO ALL MOTORING MAGAZINES.	
LIST OF OTHER RACING BOOKS FREE.	

AUTOBOOKS BOX 409-T
NO. HOLLYWOOD CALIF.

FREE FLOW

EXHAUST HEADERS

... by Almquist

POWER plus ECONOMY

NEW! BETTER BALANCED HEADERS



FINEST HEADERS You Can Buy! IMPROVED balanced design gives equal relief of back pressure on both left and right banks—Gives more power and efficiency!

Extra heavy tubing—longer lasting! Perfect fit guaranteed!

All Fords & Mercs, set

\$27.50

Extensions to Mufflers, pair.....**58.50**

"BUILD-UR-OWN" HEADERS

SAVE! Kit includes three 180° bends, Collector Tubes, Six Flanges & Instructions for quick assembly.

HEADER KIT.....**\$12.95**

Balanced CUSTOM EXHAUST System

DESIGNED TO GIVE . . .

- More Power
- Better Mileage
- Less Back Pressure
- Deep Throbbing Tone

Tests show up to 15% Horse-power increase!

Eliminates the back pressure caused by the stock exhaust system—thereby increasing engine efficiency & performance! Set includes: Pair of Almquist Headers, set of extensions from headers to mufflers, Two Hollywood Steel-Packed Mufflers, Left Side Tailpipes & Brackets.

EASY TO INSTALL

1935-52 Ford & Merc.....**\$49.50**
Oldsmobile 88 & 98.....**74.50**
1937-52 Chevrolet.....**59.50**
Studebaker V-8's.....**59.50**
(Any car without mufflers \$10 less)



HOLLYWOOD Twin Tones



"Finest Steel-Packed Muffler"

DEEP MELLOW THROBBING PURR!

Improved Straight-Thru design—Stainless steel packing—Extra heavy shell—Longer lasting. Guaranteed Blow-out Proof! For ALL CARS.....**\$6.95**

DUAL MUFFLER SETS

Ultra-Deep Rumbling Tone—Less back pressure! Complete with all pipes, Two Steel-pack Mufflers, Left Tailpipe, etc. For Fords & Mercs.....**\$22.95**
For Olds & Stude V-8's.....**35.00**

ORDER BY MAIL!

Please ship the following:

- | | |
|--|---|
| <input type="checkbox"/> Enclosed find \$..... | <input type="checkbox"/> Ship C.O.D. |
| <input type="checkbox"/> Set Exhaust Headers | <input type="checkbox"/> Hollywood Single Muffler |
| <input type="checkbox"/> "Build-UR-Own" Kit | <input type="checkbox"/> V-8 Dual Mufflers |
| <input type="checkbox"/> Combination Headers & Dual Mufflers | <input type="checkbox"/> Free Literature |

Specify Car & Year

"SATISFACTION GUARANTEED"

ALMQUIST
(dealers wanted)

ENGINEERING and manufacturing
Milford 44-T, Penna.

READER REFLECTIONS

ACHIEVEMENT AWARD

Gentlemen:

. . . I read with great interest your table of relative merits of fifteen 1951 cars in which the Chrysler took the top honors. Needless to say you are in for a storm of controversy over these figures; especially the column of max. road hp. However, my purpose in writing is not to dispute your measurements; on the contrary they seem to be quite consistent. For example: if anybody questions your times in the quarter mile from standing start you might point out how closely this column is correlated to lbs./road hp column. The slight inconsistencies that exist seem to be on the Hydra-Matic equipped cars which were slightly slower than their lbs./road hp would indicate. This is to be expected, however, since those engines can not develop full output in the lower gears before shifting.

K. M. MacDowell
West Newton, Mass.

Gentlemen:

. . . When you came out with the Feb. issue, I just had to say a word. I know that undoubtedly you have stirred up a nest of hornets, or something like that.

Any man, or group of men, that will stand up on their two hind feet and boldly tell the truth, state facts as measured by cold steel and instruments—well—sure is a relief to see it actually happen.

Yep—you should get a whole slew of letters from individuals telling you that they have a so-and-so of a so-and-so model just like you tested that will do a lot better—Hah!

Yep, I've heard it all my days most.

Little underpowered large body cars that you couldn't put in a California Limited and ship a hundred miles an hour—old model Chevys — Dorts — Maxwells — late models—yeh—they cruise at more'n a hunnert miles an hour!

Sure, each owner has something special just put 'er in overdrive and let 'er unwind. Boy she'll show 'er tail to mos' any car.

So—believe you me, it sure is a relief to find that a group of men, that have the ability—the know-how and everything—will go ahead and actually have the guts to put it in print. Yep, just would not have believed it myself, if I hadn't seen it.

S. Bracken
Portales, N.M.

Gentlemen:

Congratulations on the automobile performance chart which appears in the February, 1952 issue. I personally find it very complete and interesting.

Much of the information contained therein apparently is not readily available and should prove valuable to both prospective car buyers and auto enthusiasts.

R. B. Gylling
San Diego, Calif.

Gentlemen:

I am not a Chrysler owner, but I agree 100 per cent with your statement that they seem to be the only American car that is well "engineered."

Pfc. S. William
Camp Rucker, Ala.

Gentlemen:

I think your use of the Nash Statesman with Hydra-Matic in your evaluation tests is not quite fair to a good little car. The "chewing gum drive" is certainly the exception and not the rule with the Statesman. I have a stock '50 Statesman that is at least 20 per cent better in all departments than your tests indicate and it is an average 600.

The very few that have purchased the Statesman with Hydra-Matic must have rocks in their head. It defeats the purpose of this wonderful little car.

W. H. Crawley
Murfreesboro, Tenn.

Gentlemen:

The tabular comparison of U.S. stock cars shown in your February issue is very interesting. Your magazine is to be congratulated on performing a useful function overlooked by others in this country. Factual information is much better than mere impressions reported by other magazines.

We would like to know the following regarding these tests: 1. Was any attempt made to ascertain whether the cars were properly broken-in and tuned? 2. What is meant by "Average acceleration in sec."? Foot note reads "Average of all acceleration figures." Is this from standing start to some speed? 3. Are the absent brands of Chevrolet, Plymouth and De Soto to be reported later? They represent approximately 36% of car sales.

A. Howell
Mack Manufacturing Corp.
Allentown, Pa.

Thanks for your kind comments. Answers to your questions are: 1. We make no tests until the test vehicles are very well broken in. Engine tuning is checked on the Clayton Dynamometer (vehicle analyzer). 2. Refers to average of acceleration figures published in Motor Trial of car in question. Included are: 0-30, 0-60, 10-60 (top gear), and 30-60 mph, plus acceleration over standing quarter mile. 3. We reported on those 1951 cars we had tested; unfortunately we couldn't find time to include all of American production. However, we do intend to include all cars in the 1952 Award study. For more on Award story, see "As We Go to Press."—Editor.

WARNING LIGHTS FOR WOMEN

Gentlemen:

I note with despair the increasing trend of automobile manufacturers both here and abroad to use dash warning lights rather than gauges for ammeter and oil pressure.

This trend is undoubtedly due to the in—
(Continued on page eight)



balanced

1/4" stroker assembly



133 HORSEPOWER FOR YOUR STOCK FORD

WITH NO OTHER SPECIAL EQUIPMENT. This assembly comes either 3 1/2" or 3 3/8" bore giving your engine 275 or 286 cu. ins. respectively. Your stock Ford heads will then give you about 7.8 to 1 compression and your engine will develop approximately 133 horsepower. This same engine will produce a smooth dependable 170 horsepower with addition of a 1/4 cam, dual manifold and dual exhaust system.

*Special
offer good
to June 30 only*

These assemblies are made of the finest materials available. Sterling 4 ring tin-plated alloy pistons and genuine Grant rings assure long quiet engine life with perfect oil control.

PREPAID DELIVERY BY TRUCK FREIGHT TO ANY ADDRESS IN THE UNITED STATES.

New Genuine 51-ICM Mercury Crank.....	40.98
New genuine Sterling 4 ring pistons, pins and pin locks (specify whether 3 1/2" or 3 3/8" bore).....	48.00
New genuine Grant Rings.....	19.36
New genuine 29 A Ford Rods.....	26.48
New genuine Cadmium silver inserts.....	12.32
Complete assembly statically and Dynamically balanced.....	37.00

TOTAL PRICE \$184.00

BELL

SEND 25¢ FOR
EQUIPMENT
CATALOG
FOR ALL CARS

3633 E. GAGE AVENUE, BELL, 5 CALIF.



MISS ANY OF THESE ROAD TESTS?

YOU WILL BE STARTLED AND SURPRISED AT SOME OF THE REVELATIONS THAT WERE BROUGHT TO LIGHT IN THE FOLLOWING ARTICLES

The previous issues containing these features are available—check your order on this coupon. If you are collecting copies of Motor Trend . . . don't forget that a handsome binder is available to make your file complete.

1950 Ford V8	Jan. '50
1950 Hudson Pacemaker	Feb. '50
1950 Plymouth	Mar. '50
1950 Mercury	May '50
1950 Nash Rambler	June '50
1950 Oldsmobile 88	July '50
1950 Chrysler New Yorker	Aug. '50
1950 Chevrolet	Sept. '50
1951 Henry J	Oct. '50
1951 Kaiser	Nov. '50
1951 Ford V-8	Jan. '51
1951 Packard 200	Feb. '51
1951 Hudson Hornet	March '51
1951 Mercury	April '51
1951 Chrysler V-8	May '51
1951 Studebaker V-8	June '51
1951 Lincoln	July '51
1951 Dodge	Aug. '51
1951 Pontiac 8	Sept. '51
1951 Buick Special	Oct. '51
1951 Cadillac	Nov. '51
1951 Nash Ambassador	Dec. '51

1949

- | | | | |
|-------------------------------|-------------------------------|-------------------------------|--------------------------------|
| <input type="checkbox"/> Oct. | <input type="checkbox"/> Jan. | <input type="checkbox"/> May | <input type="checkbox"/> Sept. |
| <input type="checkbox"/> Nov. | <input type="checkbox"/> Feb. | <input type="checkbox"/> June | <input type="checkbox"/> Oct. |
| <input type="checkbox"/> Dec. | <input type="checkbox"/> Mar. | <input type="checkbox"/> July | <input type="checkbox"/> Nov. |
| | <input type="checkbox"/> Apr. | <input type="checkbox"/> Aug. | <input type="checkbox"/> Dec. |

1950

- | | | |
|-------------------------------|-------------------------------|--------------------------------|
| <input type="checkbox"/> Jan. | <input type="checkbox"/> May | <input type="checkbox"/> Sept. |
| <input type="checkbox"/> Feb. | <input type="checkbox"/> June | <input type="checkbox"/> Oct. |
| <input type="checkbox"/> Mar. | <input type="checkbox"/> July | <input type="checkbox"/> Nov. |
| <input type="checkbox"/> Apr. | <input type="checkbox"/> Aug. | <input type="checkbox"/> Dec. |

1951

- | | | |
|-------------------------------|-------------------------------|--------------------------------|
| <input type="checkbox"/> Jan. | <input type="checkbox"/> May | <input type="checkbox"/> Sept. |
| <input type="checkbox"/> Feb. | <input type="checkbox"/> June | <input type="checkbox"/> Oct. |
| <input type="checkbox"/> Mar. | <input type="checkbox"/> July | <input type="checkbox"/> Nov. |
| <input type="checkbox"/> Apr. | <input type="checkbox"/> Aug. | <input type="checkbox"/> Dec. |

1952

- | | | |
|-------------------------------|-------------------------------|--------------------------------|
| <input type="checkbox"/> Jan. | <input type="checkbox"/> May | <input type="checkbox"/> Sept. |
| <input type="checkbox"/> Feb. | <input type="checkbox"/> June | <input type="checkbox"/> Oct. |
| <input type="checkbox"/> Mar. | <input type="checkbox"/> July | <input type="checkbox"/> Nov. |
| <input type="checkbox"/> Apr. | <input type="checkbox"/> Aug. | <input type="checkbox"/> Dec. |

Motor Trend, Dept. 4

5959 Hollywood Blvd.

Los Angeles 28, Calif.

I enclose

\$.....for.....issues at 25c each

\$.....for.....Binders at \$2.00 ea.

name

address

city

zone state

A LOT OF POWER..

TRUE. . . . a lot of Power is represented here—Power the Grant way attained through precision and diligence in manufacture is paying off in popularity with the leaders.

Witness the win of Michael Graham at Del Mar driving an Allard J2—using Grant Rings, of course. A conclusion! Grants are being proved on the tracks for your satisfaction on the road.



We would like to hear from you jobbers and distributors who want to help satisfy the demand for Grant Piston Rings in your area. Send for Gerry Grant's FREE Catalog.

Grant
PISTON RINGS
GRANT & GRANT
241 N. WESTMORELAND AVE.
LOS ANGELES 4, CALIF. DUNKIRK 3-2185

METRIC & WHITWORTH WRENCHES *For Servicing All Foreign-Make Cars*

Satisfactory servicing and repair of a foreign-make car can only be secured with wrenches that fit! From Snap-on, leading manufacturer of standard automotive service tools, you can get wrenches and sockets in Whitworth sizes, 7BA, .172" to 1.670" (for English cars). In metric sizes (for all other foreign makes) 4 mm. to 32 mm. Available direct from factory only. Write for free Metric-Whitworth folder and standard tool catalog.

Snap-on Tools

THE CHOICE OF BETTER MECHANICS

Snap-on Tools Corporation 8023-D 28th Ave.
Kenosha, Wis.



Reader Reflections

(Continued from page six)

fluence of women who look upon an automobile as something you put gas in and it takes you where you want to go, with a convenient window by the driver's seat so you can stick your hand out when you're going to do something illegal.

These same women would raise the dickens if they had only warning lights on stoves to tell them when the oven is "hot" rather than a temperature regulator, or a warning light on the radio to tell them when it is tuned to a station, without a dial to tell them which station.

The next thing you know, you'll have a red light where the speedometer used to be, to let you know you're going pretty fast. Or a warning light where the steering wheel used to be, to tell you that you have just hit the broad side of a barn and should have had sense enough to turn.

It would be far more reasonable to use more, rather than fewer, dash instruments, and include a roll of adhesive tape with every new car so that people who don't believe in instruments don't have to look at them.

K. C. Reed
Houston, Tex.

It may be nothing more noble than sentiment, but we would like to cast our vote for dials, too . . . especially the precision, watch-like meters and gauges that have always been set in the lush panels of the world's great automobiles.—Editor.

BRING ON THE STEAM ENGINE

Gentlemen:

No doubt the marketing of a good steam car would cut heavily into the sales of gasoline driven cars because of its low all-around maintenance cost plus its performance; however, here is where I take exception to Mr. Suttle's statement, "How could a dealership exist without service profits?" Having been a mechanic, service manager and now a dealer for the past 38 years, I believe I am qualified to speak. I believe the majority of automobile dealers would be very happy to put a padlock on the door and leave it locked in so far as the service department is concerned, because it is only a necessary evil that has to be maintained as a part of the business. Most certainly there isn't any profit in it from a standpoint of customer labor sold. If again you say "oh yeah," here are some of the reasons why: we pay our mechanics \$2.02 per hour, we charge \$4.00, however, there will be about one man in ten that will put out enough work in an eight hour day to charge for the full eight hours; in fact an average of about six hours a day per man can be charged for. Now, his contract calls for $\frac{5}{6}$ th of a day per month accumulative vacation time, all statutory holidays with pay, plus coveralls furnished free, laundered free, two changes per week, no deductions for work improperly done. It doesn't take a very smart man to figure out that what you have left after the above expenses would not come anywhere near paying the service department's share of the rent, lights, power, water

and garbage, as well as the service manager's wages and a part of the accounting costs. In fact, in our part of the country there just isn't such a thing as a true profit in the service department of a new car dealer.

I am, however, fully in favor of a good steam car being marketed, and if one ever is I should very much like to have a franchise.

A. Pierson
Bremerton, Wash.

We received a number of letters from very substantial citizens like Mr. Pierson who wanted to put in a bid for a steam-car dealership. There seem to be more customers than cars, even in the steam field.—Editor.

MOLDED MEXICAN MERC

Gentlemen:

I enclose a photograph of my car. It is a '50 Mercury club coupe. The engine is standard but it took us plenty of time to change the rear fenders for '51, adding the Cadillac



fins, leading in the whole car, and the work of the exhaust pipes.

This is the first car that has been customized in this state.

The colors are china red and black. I hope that with time we can do the beautiful work we see published in your magazine.

Marcello Caraveo, Jr.
Chihuahua, Mexico

Congratulations, Marcello, on a clean job. Hope to see more of our vecinos follow your example.—Editor.

WHAT'S ITS NAME?

Gentlemen:

Under what car name does a person apply when sending for a license for a custom car?

R. Brandl
Manitowoc, Wis.

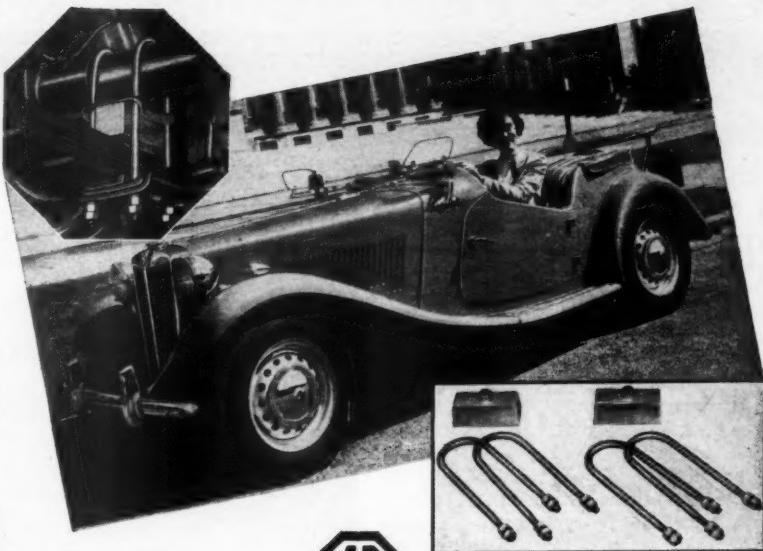
Write to Motor Vehicle Department, Madison 2, Wis. They can give you the right answer for your state. In general, car name is derived from the chassis but there are exceptions. A Chevrolet with a Mercury engine would be listed as just that—a Chevrolet with a Mercury engine. If, however, you build up a car from scratch it would be registered as an "assembled" car.—Editor.

PRAISE FOR KAISER

Gentlemen:

I have just finished going over your comparison chart on the 15 cars you tested and I see that my Kaiser car is in eighth place and I feel very good, as when I pick up my hood and see the size of my engine, alongside that big Chrysler, Oldsmobile, Hudson, Lincoln, and last but not least the Packard Eight. I sure feel that Kaiser has really done a fine job in the few years he has been making his fine car.

C. Hunsicken
Bound Brook, N.Y.



Give Your this LOW LOOK with these new LOWERING BLOCKS

Emphasize the traditional sweep-styling of your MG with these new Lowering Blocks. They will drop the overall height of your car to give it that low, *low* . . . longer . . . streamlined appearance you've always wanted. And from a practical and safety angle the lower center of gravity improves car handling, stability and cornering at high speeds. Solid cast aluminum blocks. Black oxide protective-coated U-bolts. Easy to install. Put a set on your MG now!

Write for information and price on this newest Autocessories, Ltd. Specialty today.

AUTOCCESSORIES, LTD.
DIVISION OF ARNOLD CORPORATION
WARSAW, INDIANA

Now a bigger, better
Custom Restyling
MANUAL

GREAT
NEW 176 PAGE
EDITION

OVER 350 PHOTOS, CUTAWAY DRAWINGS, SKETCHES
TREAT EVERYTHING FROM SPECIAL INTERIORS TO PADDED TOPS.

SPECIFIC CHANGES cover Crosleys to Cadillacs
Literally THOUSANDS of comprehensive IDEAS

Post Publications
BOX 926-M, ARCADIA, CALIFORNIA

\$2
POSTPAID
Satisfaction Guaranteed

Spotlight on Detroit as we go to press

DETROIT, MICHIGAN—A frantic race for horsepower, per se, seems to be the major news emerging from new car introductions this year.

Many serious Detroit observers are appalled at the development which makes it possible for *any* driver in this country—regardless of qualifications—to be turned loose on overcrowded highways with a hurtling, two-ton monster capable of putting out from 150 to 190 bhp.

Just what this super-abundance of power means to the average motorist is hard to evaluate, particularly when it is coupled with braking and cornering characteristics which have not kept pace with speed and bhp boosts.

One automobile engineer, whose company is featuring a jazzed-up production car this year, proudly points out that the increased power offers more efficiency. In this particular case he states that the car travels *one mile* farther on each gallon of gasoline!

There are a number of prominent Detroit auto authorities who are not entirely in sympathy with this 1952 philosophy. They will tell you—in guarded conversations—how a really well-designed production car can achieve peak performance, safely, and with half the present high bhp levels.

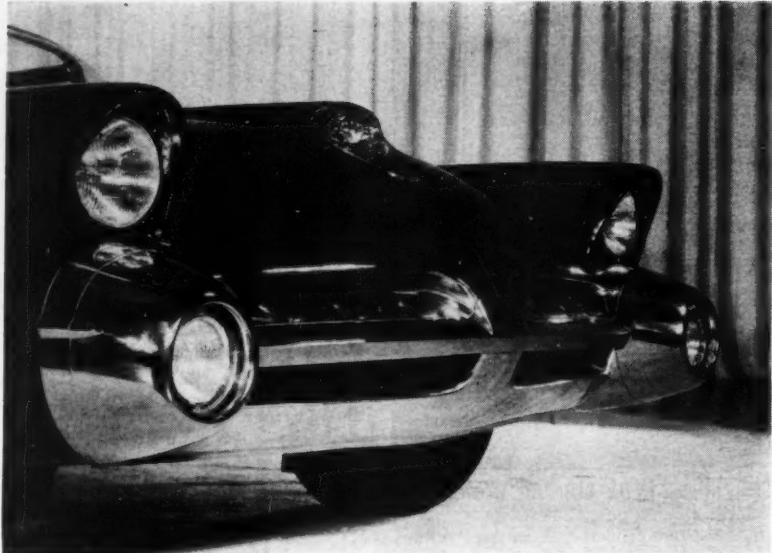
Apparently, the horsepower battle is being waged primarily for whatever sales appeal is inherent in it, regardless of other considerations, although latest advertising being released by the companies engaged in the power output war hints that the firms involved are somewhat wary of the forces they are unleashing to the general public.

One manufacturer advises potential buyers that they may never use all the horsepower at their command. Another warns the public that there is danger in their new cars because they are loaded—with bhp. In each case the ads subtly suggest to motorists that they take it easy once behind the wheel.

For the immediate future there seems to be no end to this strange struggle, and you may expect bhp to creep up gradually in all lines during the next few years.

NEW CADILLAC TOPS FIELD

The 1952 Cadillac is the latest Detroit product to soar into the stratosphere, with a 190 bhp engine as its feature. Styling is virtually unchanged, but the firm is introducing two special cars in honor of its 50th anniversary.



This is Ford's recently-revealed "Continental Nineteen Fifty X," described by its builders thus: "A blend of sports car flavor, custom dignity and practicality . . . a pilot model . . . being studied toward future development as a four-passenger sedan." Overall height is 56.7 ins., length 220 ins. Curved windshield blends into clear-dome top. The non-glare, low heat-transmitting top over the front seat retracts mechanically into the leather-covered canopy

Cadillac has the new GM Hydra-Matic, the GM power steering device, brakes which are one inch larger, a new alternate 3.07 axle ratio, and the GM four-jet carb.

As predicted in MOTOR TREND the car is characterized by dual exhausts, al-

(Continued on page thirty-four)



118 SCIENTIFIC MILEAGE TESTS . . .



PROVE MILE -O- METER

REG. U.S. PAT. OFF.

Deluxe model now illuminated!

MILES PER GALLON AND MOTOR TUNE-UP GAUGE

Marshall E. Veach, famed automotive engineer, tested the "Mile-O-Meter" on 118 cars of all years and makes. He used the scientific "Vernimetric" system of gasoline measurement. This is calibrated for one mark on the Vernier tube for each eight feet of vehicle travel. Read his report of "Mile-O-Meter" accuracy, in the lower left hand corner!



CONFIDENTIAL FUEL CONSUMPTION TEST OF "MILE-O-METER" BY W. E. VEACH

Make of car Packard Year 1947 Super
Fuel used Ethyl Oil used 18.6.30
Idle Vacuum 21" Tire Pressure .25 lbs.
Compression Ratio 6.85:1 Rear Axle Ratio low
Displacement 356 cu. in. Brake Drag 0

HIGH GEAR TEST

Linear Vacuum	Actual Miles Per Gallon	"Mile-O-Meter" Reading	Error to Correct
18 1/2	15.217	15 1/2	none

Signed W. E. Veach

"STANDARD THE WORLD OVER -
IMITATED BUT NOT EQUALLED"



Hope 24 page instruction book
PLUS "Mile-O-Meter" Mileage
Calculator — both included free
with your order.

"Mile-O-Meter" is more than an accessory, it is a Scientific Instrument of proven merit and the standard performance meter used throughout the world. Tested and approved by Engineers universally. No previous experience required to install and understand the "Mile-O-Meter", and it instantly tells you your Motor Condition and your gas consumption at every speed.

DEALERS' INQUIRIES INVITED

SEE YOUR DEALER. IF HE CANNOT
SUPPLY YOU, ORDER DIRECT TODAY!

DELUXE MODEL
3 1/8" Dia. \$14.95
STANDARD MODEL
2 5/8" Dia. \$9.75
(Both include Fed. Tax)



Copyright 1951

Deluxe Model with Chrome Ring 3 1/8" Dia. \$14.95

Standard Model 2 5/8" Dia. . . . \$9.75

Both Incl. Fed. Tax

GALE HALL ENGINEERING

DEPT. 149

BOSTON 18, MASS.

The most important new meter in America

Your Editor

SAFETY INSPECTION PROBLEMS IN TEXAS

WE ALL KNOW that there are many facets to the problem of safety. Even so, it came as somewhat of a shock to us the other day when we received a letter and newspaper clipping from a reader in Dallas, Texas pointing up a glaring weakness in the idea of official automotive safety inspections. The weakness is something that we felt would be properly worked out before any such plan was put into effect.

The background of the story is this: The Texas State Legislature enacted on May 5, 1951 an automotive safety law, requiring a 14-point inspection of all automobiles on the road, before April 2, 1952, the deadline for acquiring 1952 license plates. Inspection stations were set up throughout the state (all privately owned garages) with the monumental task of inspecting 3,200,000 vehicles before the deadline.

Properly organized, such a plan could do much to reduce highway accidents. Unfortunately in this particular instance, it did much to, as the reader explains,

"confuse everyone in the state of Texas." We hope that what the reporter found true of eight inspection stations in Dallas is not true of the entire state.

Here's what Dennis Hoover, reporter for the *Daily Times Herald* (Dallas), did: He took his 1949 car to eight different official Dallas inspection garages as "just another motorist." Two of the garages passed the car without a hitch, collected the \$1 fee and pasted an inspection sticker on the windshield. The other six gave varying verdicts as to what repair work was required. To get a fair spread of garage types, he went from small suburban stations, with one mechanic, to large downtown garages, with as many as four mechanics.

The inconsistency of inspection procedures at these various garages makes a strong argument for proper preparation before putting a safety check into effect. Only one garage out of eight said the brakes needed relining. Two garages spotted a leaking brake cylinder. One out of eight said the front wheels needed

aligning. Mechanics at six garages failed to inspect one or more of the safety features prescribed by law. Only two of the eight garages agreed on how the headlights should be focused, despite the fact that they all used identical headlight testing machines.

As we all know, a chain can only be as strong as its weakest link. Safety inspection is one of the links in the automotive safety chain. It MUST be strengthened if motorists are to continue to have faith in a uniform safety plan. It is unfortunate that in this particular instance the inspection garages were not properly instructed. A situation such as this does irreparable damage to the cause for safety.

We earnestly hope that if this situation is true in other parts of Texas, that the clarification of the law and the deadline extension to September 6th will give Texans time to remedy the situation. In any event, other states should take heed of the possible pitfalls before sanctioning a safety check plan.

—Walter A. Woron

FOR EVERY CAR . . . FOR EVERY PURPOSE!

K-L-G
Spark Plugs

WIN . . .

On road . . . on track . . . on highways . . . K-L-G Spark Plugs, straight from Britain, outperform all others, in America, in Europe, all the world over. They are the favorites of racing drivers everywhere for whom they have been racing from success to success, year after year.

EVENTS WON ON K-L-G

Bonneville . . . Daytona . . . Monte Carlo Rally . . . Victory Cup Trial . . . Scottish Six Days Trial . . . Junior T.T. . . . Dutch Grand Prix . . . Swiss Grand Prix . . . Belgian Grand Prix . . . Ulster Grand Prix . . . Grand Prix des Nations . . . Silverstone . . . North West 200 . . . and a host of others!

ORDER YOUR
K-L-G SPARK
PLUGS TODAY

Commercial Standard or Watertight; Corundite Racing Standard or Watertight; Mica Racing; Platinum Point Standard; Also Waterproof Cover P & B Type Terminals. Immediate Delivery.

Make us your Headquarters for: Smiths' Motor Accessories, Ltd., Joseph Lucas & Co., and Dunlop Rubber and Tire Corp., Parts Products and Service, as well as for MG parts, sales and service.

AUTOCCESSORIES, LTD.
WARSAW, INDIANA, U. S. A.

LUCAS
DUNLOP
SMITH

S. H. ARNOLT, INC.
415 EAST ERIE STREET, CHICAGO 11, ILL.

... and so to press

(Continued from page five)

America in Chicago's International Amphitheatre. If you have an unusual car you'd like to have exhibited at either of these shows, drop a line to the promoters.

★ ★ ★

Motorama Foundation note: Thanks to all of you who wrote interesting letters on the Motorama Foundation idea. You will like knowing that the Foundation is progressing toward the realization of an outdoor research laboratory. G. H. "Tiny" Snell has been retained as field representative of the Foundation. Tiny is the field director of the National Hot Rod Association and has done a monumental job across the country in translating the needs of youth to law enforcement agencies, educational groups, and civic leaders, plus explaining Southern California automotive achievements to fascinated Detroit engineering heads. The Foundation will benefit from this NHRA loan . . . for Tiny is a man who believes in youth, and is big enough to do some fighting for it.

★ ★ ★

AFTER WE PUBLISHED the results of the MOTOR TREND Engineering Achievement Award, one of the most frequent questions we were asked was, "How can you be sure that the cars you tested were fair examples of that particular product?"

Our answer is this: First of all, we arrange for all of the test cars through the factory or the local zone office, telling them in advance how and what we're going to do to the car on the test. It's quite evident that the manufacturers know how exhaustive our "Motor Trials" are because of the good condition the cars are in when they're turned over to us. A very good example of this is what one manufacturer has done—he has tagged two cars for our use that are now coming down the assembly line.

After we get the car, we check it out completely on the Clayton chassis dynamometer, making any minor adjustments as necessary. For our reference, we use the Automobile Manufacturers Association Specifications. If, by some chance, the car is not up to par, we would then return it to the manufacturer or his representative in exchange for another car.

(Continued on page forty-two)

CALENDAR OF OUTSTANDING EVENTS

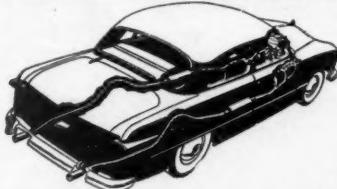
- Mar. 3-8—DENVER MOTOR SHOW, information obtainable from Chamber of Commerce, Denver, Colo.
March 13—Sebring, Florida Miniature Le Mans Endurance Race, SCCA
Mar. 14-23—PORTLAND MOTOR SHOW, Pacific International Exposition Arena, Portland, Ore.
Mar. 22-23—Palm Springs Road Race, Calif. Sports Car Club
April 19, 20—Pebble Beach, California Road Race, SCCA
Apr. 19-27—CUSTOM CAR SHOW, 1243 Elm St., Cincinnati 10, Ohio.
May 30—Golden Gate Park, San Francisco Road Race, SCCA
May 30—Indianapolis "500," AAA

YOU'LL BE SURPRISED TOO . . .

AT ALL THE ADDED SPEED,
POWER, PERFORMANCE AND
EFFICIENCY YOUR CAR WILL
HAVE WHEN YOU INSTALL THE
ORIGINAL

Belond

EQUA-FLOW EXHAUST SYSTEM



ELIMINATE BACK PRESSURE
and INCREASE HORSEPOWER

Motorists all over America are acclaiming the BELOND EQUA-FLOW Exhaust System as the best single improvement available for automobiles equipped with a V8 engine. The standard exhaust systems are too small in capacity and the exhaust gases are forced to make restricted turns. In some cases, all of the exhaust from the left side of the engine must go forward, cross over and pass through the right side exhaust manifold before starting toward the muffler and the rear of the car. In most cases, the standard single muffler does not have enough capacity to handle the full volume of exhaust from the engine.

These conditions create exhaust back pressure, consuming valuable horsepower by forcing the exhaust through the manifolds and single muffler. When this pressure is relieved, that horsepower can be fully utilized. When exhaust back pressure is reduced to an absolute minimum by the BELOND EQUA-FLOW Exhaust System, the horsepower output is actually increased, resulting in improved performance, efficiency and speed.



AVAILABLE FOR: FORD V8 • MERCURY
OLDSMOBILE • LINCOLN V8 • CADILLAC

Southern California MUFFLER COMPANY

11039-49 Washington Boulevard
Culver City 2, California
VERmont 9-7038, TEXas 0-3885

Belond EQUA-FLOW EXHAUST SYSTEMS

Available complete with MELLO-TONE MUFFLERS, or less mufflers for use with stock mufflers

1935-51 FORD V8 or MERCURY
(Specify Standard or Automatic Transmission)

With Mello-Tone Mufflers **52.50** Less Mufflers **44.50**

1945-51 OLDSMOBILE 88 & 98
(Specify Standard or Hydramatic Transmission)

With Mello-Tone Mufflers **74.50** Less Mufflers **67.50**
(Quite Loud)

All prices f.o.b. Culver City
If you live in California, add 3% sales tax.

1949-51 LINCOLN V8
(Small, Hydramatic Transmission only)

With Mello-Tone Mufflers **74.50** Less Mufflers **67.50**

1950-51 CADILLAC V8

With Mello-Tone Mufflers **99.50** Less Mufflers **84.50**
 Send me free literature

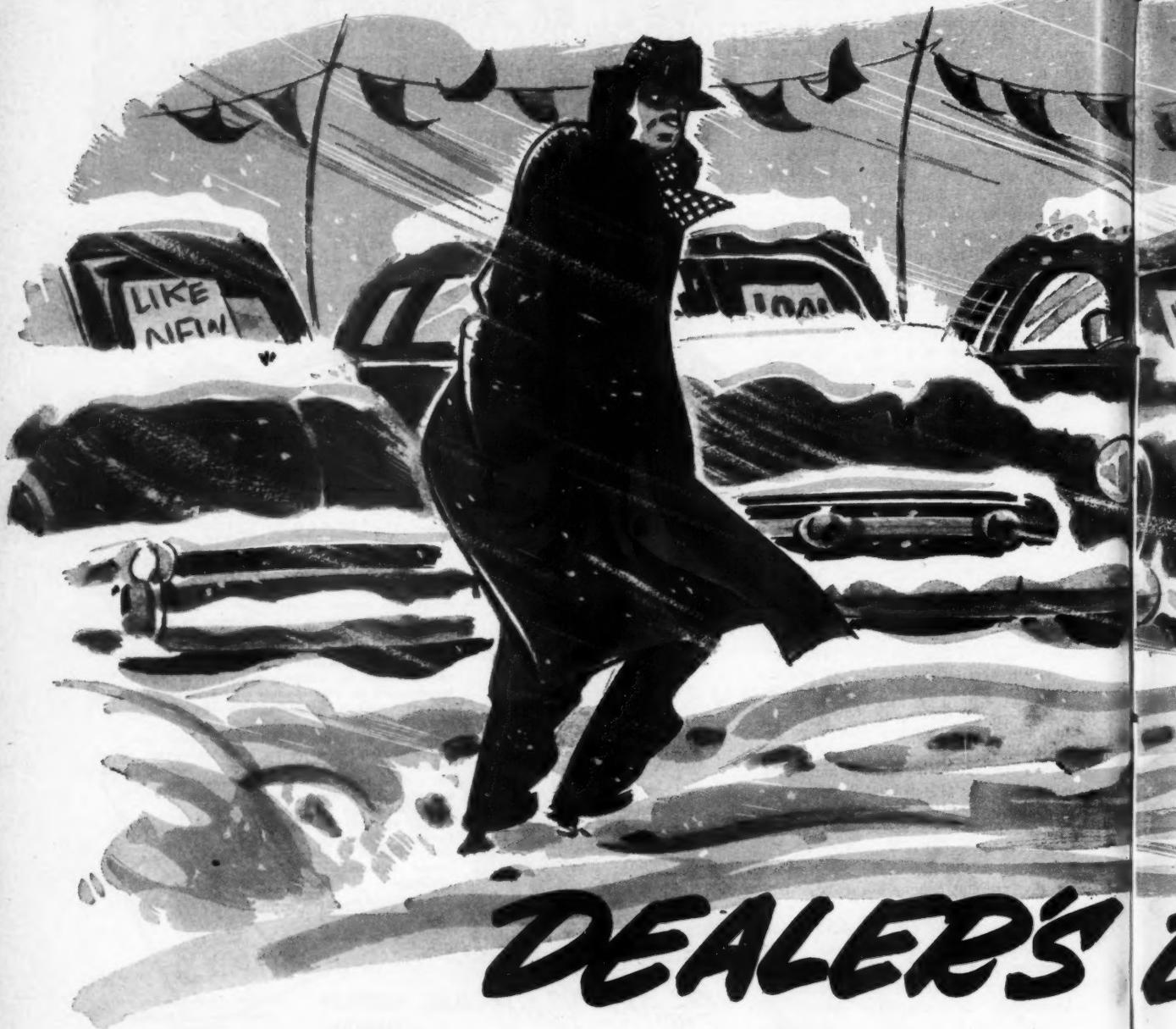
Check or money order in full enclosed.

50% deposit enclosed, ship, balance C.O.D.

My Car Is:

Make	Year	Model	Body Style	Kind of Transmission (very important)
				2-4

PRINT NAME AND ADDRESS CLEARLY IN MARGIN



DEALER'S

THE MASTER PLAN of the used car business is simple—as every barber and shoe-shine boy will quickly tell you. You buy a car for \$1150 and sell it for \$2000. Quick and profitable . . . a golden road to the upper income bracket. As a friend of mine advised me, "All you need is a few hundred dollars to start with." He quite innocently forgot to add the word "thousand."

But bright-eyed, firm of tread, rosy checked, you rent a lot on a side street zoned for business, and you're entitled to be a friend to man.

Then you go about the formality of

buying a license to operate. Sometimes this formality becomes funereal, since some local board meets, say, on the third Thursday of each month and, then and there, right beside the cracker barrel, votes yea or nay on your application. Many communities frown on used car lots as business eyesores, and often established dealers view any newcomer with alarm and hastily use political pressure to have the license refused on some trumped-up charge. But being a go-getter launching a career, you can nimbly side-step this obstacle with presidential intervention, or, better yet, with judiciously placed dollars

from your tenderly hoarded operating capital. I *bought* a second class auto dealer's license (Massachusetts).

A first class dealer has a franchised agency and can sell both new and used cars. A second class dealer—that's me—buys and sells used cars, while a third class dealer deals only in junk and parts. The strange and varied experiences of eight years in the business leave me firmly convinced that all licenses should be third class.

Once in the business, strange, seldom considered problems wait to steal the bloom from the cheeks of the unwary. Dealer's plates, as an example, are a spe-



Illustrated by Wilson Cutler

DOLDRUMS

By
Charles D. Harrington

cial poison. The Department of Motor Vehicles issues a dealer special plates which entitle him to move or demonstrate any car up for sale. They also entitle him to have more accidents than a community of octogenarian hot rodders, and present a wondrously varied group of legal and domestic complications. If some prospective customer, or even a salesman out demonstrating one of your cars to his girl friend, doesn't sideswipe the mayor's inaugural procession, you will look up to find Uncle Joe (by marriage) sidling toward you. His license is suspended and his number plates are held in escrow by the

police, and he just wants to borrow your plates to move his car (which has been declared unsafe by the insurance company) from East Bushlap to Duberville.

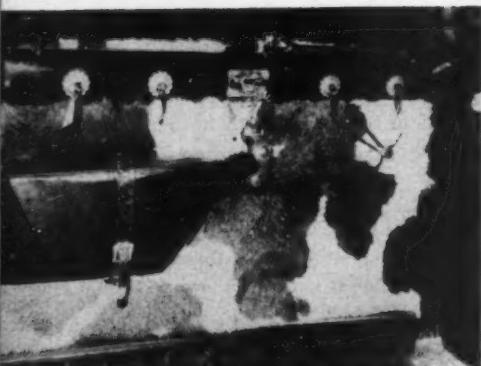
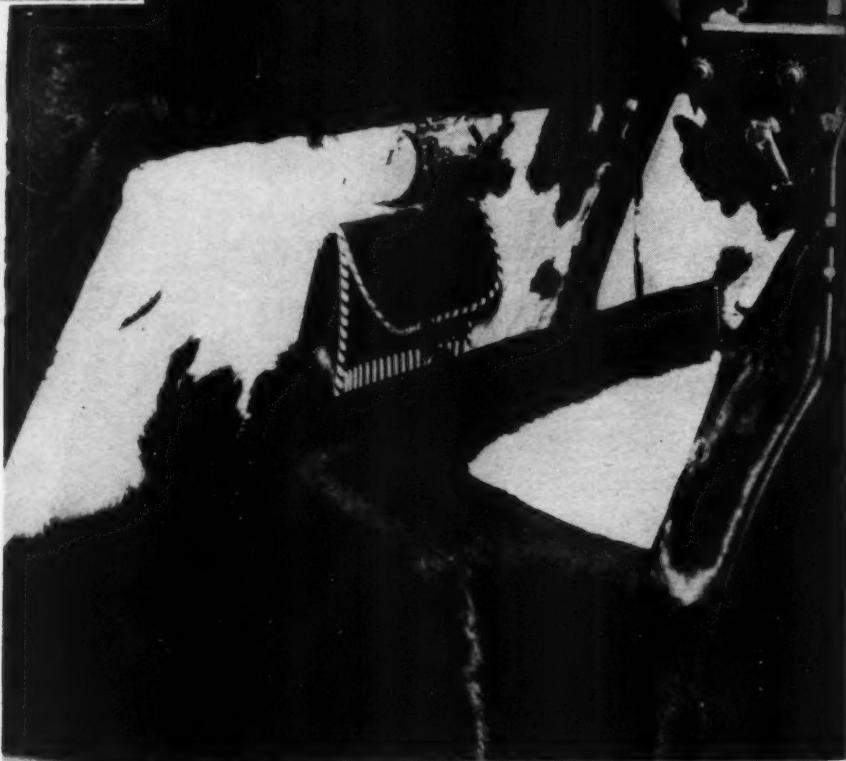
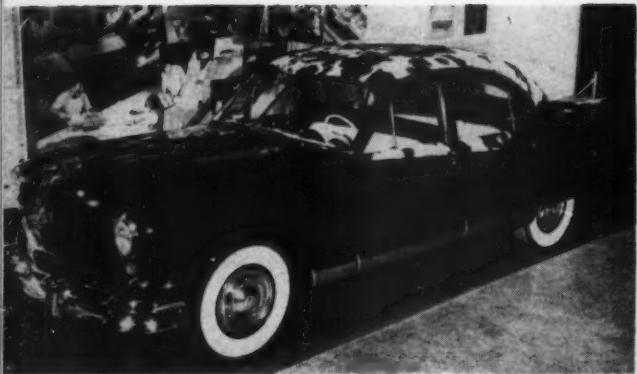
During the time you are getting the plate problem under control, you probably have been neglecting another headache. With 20 or 30 cars on the lot (representing 99 per cent of your worldly wealth) it is difficult to explain to pleading friends and relatives exactly why you can't loan them even *one*. It doesn't have to be new, they say. Any old '48 or '49 model will do if the tank is full, the tires are new, and a credit card can be conven-

iently found in the glove compartment.

And, of course, everybody in town has learned that you can purchase radios, heaters, tires, batteries, and seat covers for 90 per cent off the list price. They do not want a 90 per cent discount: 85 per cent is fair enough, even for a fellow lodge member. And then, very naturally, since you have the parts at the lot you can just have your man install them and, perhaps, take care of a few odd jobs like ironing out a fender, or putting in a new window glass, or doing a complete motor job—er, ah . . . at the same discount, of course.

(Continued on page forty)

Kaiser meets Calf



FOR THE CONNOISSEUR of something-or-other, Kaiser-Frazer has built what must be the maddest interior of this year. Termed "Caballero" in the publicity releases, the car utilizes the pelts from 20 Holstein-Friesian calves, decorated with hammered silver. The rope cord on the back of the front seat has been replaced by a bit cord.

Three ranking brains collaborated on this and five other products in the series —Veepee H. V. Lindberg, Senior KF stylist E. H. Daniels, and Carl Spencer, color stylist. If anything, the rest of the line is madder than the illustrated example. There

are two more Caballeros—one upholstered in Palomino, the other in Arabian stallion.

Worth about \$15,000 are the Explorer, Safari, and South Seas. The Explorer, polar type, is finished in polar bear skins and trimmed in mouton. The Safari, darkest Africa's contribution, carries zebra, lion and lioness skins. And the South Seas comes with rush reeds, rattan, and pandanus plant interior.

KF has sold four of the six already. The stylists are pleased with the result and hint that possibly you may see some variations of the sumptuous sextet in a future stock production.



SKORPION

Anyone can assemble this low budget sport custom for \$900

HERE'S THE WAY it figures: You buy a used Crosley in good running condition for \$250. Body condition isn't important because your next purchase is the Skorpiion body kit—\$445 plus tax. Modifications of the frame will cost about \$60 and paint and upholstery together will only nick you for \$50, unless you can't live without exotic skins on the seats. Total so far—\$805. With the remaining \$95 you can buy all the accessories you need.

For your \$900 investment you have a low-cut, ground-hugging sport custom, agile in traffic and sure-footed in corners. It's for fun, not competition, but a few more dollars will make a thing of speed out of the stock Crosley engine and give you enough authority to play tag with MGs. And you'll be driving one of the best-looking cars

(Continued on next page)

BY EUGENE JADERQUIST

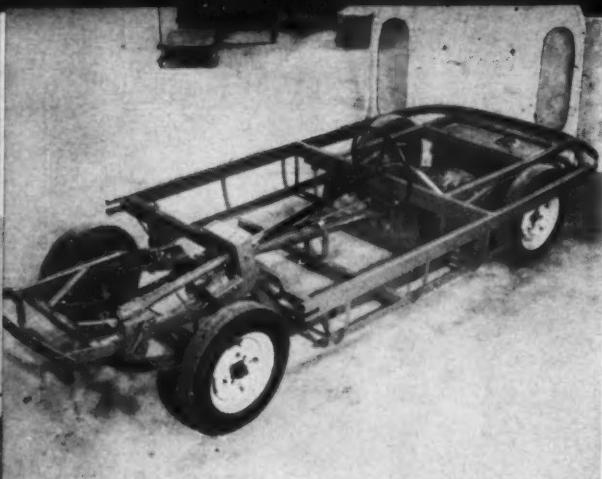
photos by

FELIX ZELENKA—ERIC RICKMAN



Automobile designer Ralph Roberts (left) and Fiberglas-plastics expert Jack Wills look fondly at their handiwork, the first completed Skorpiion

Basic Body kit consists of four large pieces: hood, body, rear bumper, deck lid. Fenders are optional accessories. Material is so light that one man can handle the entire assembly by himself



1 Modified Crosley frame looks like this. Center has been dropped six inches. New crossmember aft of drop is for extra body support. Price \$60



2 Plywood sections are easy for the customer to buy and cut. Five-ply $\frac{3}{8}$ inch wood is recommended, as is undercoating. In this early picture, shift lever can be seen still in old position



5 Rear fenders are accessories, cost \$19.95 for pair. Body material and wood may be worked with same drill



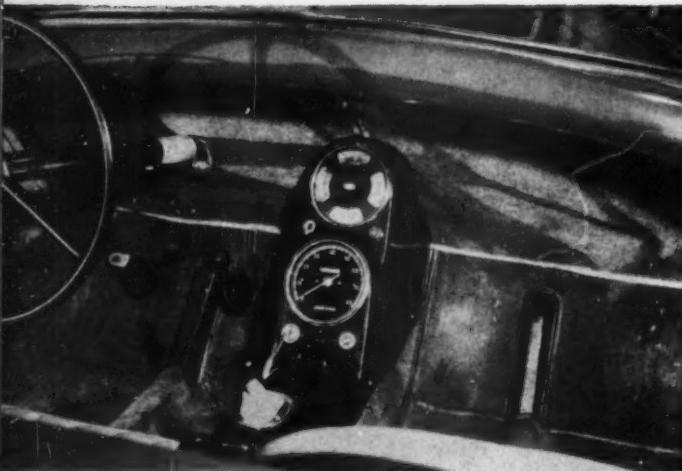
on the road, designed by a talented professional and built by one of the West's leading authorities on Fiberglas-reinforced plastics.

Ralph Roberts, the designer, went to work at the LeBaron office in New York in 1921. In the next twenty years he successively became the top man with that famous custom-body firm and chief of the styling section for the Briggs corporation in Detroit. The Chrysler Thunderbolt was one of his designs and classics fans are fa-

miliar with his work on such chassis as the Packard Twelve and the Chrysler Custom Imperial.

Jack Wills has been working with plastics since 1936. He's built everything from ornamental dogs to full-size hulls for boats and was one of the first to recognize possibilities of reinforcing the synthetic resins with fabrics. His design for the Skorpion body is called "sandwich" construction, because two layers of Fiberglas mat are sandwiched between two outer layers of Fiberglas woven cloth. Tensile strength comes from the woven cloth and resistance to impact is furnished by the mat.

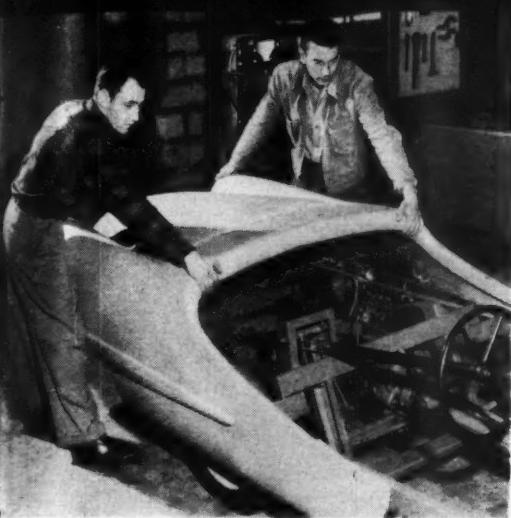
The Skorpion is frankly aimed at the low-budget market. For that reason the Crosley chassis was chosen and so used that most of the Crosley equipment fits the Skorpion. At present the production of the Wilro company (Wil from Wills; ro from Roberts) will be limited to body



7 Instruments shown on this pilot Skorpion are half Crosley, and half Stewart-Warner. Note the simplicity of this cockpit, harmonizing with uncluttered exterior lines



8 Torque-tube is another accessory—\$22.50. It serves as glove compartment and instrument panel. Entire interior is for owner to design to suit his taste and pocketbook



3 Hood is first hinged to front body section and assembled unit slipped over framerails. Body connecting bolts are molded into panels



4 Rear body section is smallest of the four into which Skorpion is divided. In kits delivered to the customer, entire body is primed for painting. Here the rear bumper and deck lid are still rough

kits only. Future plans call for the manufacture of complete cars, perhaps on different chassis, perhaps equipped with mills as hot as the Ford V8-60.

The partners are working on the assumption that most enthusiasts would like to have a hand in the assembly of the car they drive. Skorpion customers are expected to remove the old body from the used Crosley, cut new plywood understructure, bolt on the new body, wire the tail lights and stop lights, install accessories. All necessary instructions are furnished with the body kit. There is a blueprint of the frame modifications so the frame shop won't spend your money and their time figuring out the new dimensions. And for the plywood understructure, patterns are supplied thus relieving you of the time-consuming task of transferring measurements from chassis to wood. The final step—painting—is no problem because the body is

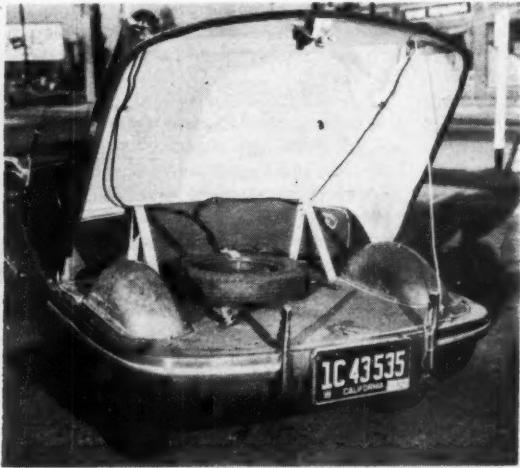
smoothed and primed before shipping. All you need do is pay for color coats.

Most intriguing of the accessories is the repair kit. If you stub a fender and either tear it or cut a hole in it, you can easily repair it yourself. For \$7.50 you buy a package containing Fiberglas material, resin, activator and instructions. Simply stuff the material in the hole or crack, impregnate with the mixture of resin and activator. After allowing a short time for the plastic to cure, buff smooth and paint. No re-shaping to do, no hammering.

It's just possible that Wilro has hit on the right combination. Certainly the hardest part of any car to build is the body and it is seldom that a complete body can be purchased for as little as \$445. One thing is definite—if the Skorpion becomes popular Ralph Roberts and Jack Wills will see a lot of competition spring up all over the country.



6 Assembly ends with hanging of deck. Roberts and Wills have never clocked the operation, but say it's fast



9 Carpet, wiring, latch are furnished by customer. Embedment to hold latch is molded right into deck-lid. Bumper strips, like other chrome, is extra



10 Skorpion is tight and compact with its scant inches of rear overhang. Body has been shortened one foot from stock Crosley dimension. Windshield and brackets are optional accessories



'52 PLYMOUTH

PHOTOS BY ERIC RICKMAN

A REMARKABLY honest piece of merchandise, but high-priced for what it has to offer the buyer," was the definition of the super-deluxe '52 Plymouth Cranbrook agreed upon by Woron, Borgeson, and Bodley after three days and 1100 miles of testing the latest version of this popular low-priced car. The Plymouth is *inexpensively-but not cheaply* made. For example, a tiny amount of money is saved by utilization of a very simple but serviceable glove compartment latch . . . but a more or less similar amount of money is spent in equipping the engine with long-wearing chrome top piston rings. In other words, the new Plymouth strikes us as a machine in which really good construction has been blended with *economical* construction in a remarkably well-balanced way. There's no question about it: Plymouth's high position in the low-price field has been well earned.

"Best Ride of the Economy Cars . . ."

This is the most impressive single characteristic of the Plymouth. Over rutty,

rugged, rock-strewn roads at 45 mph our test car rode smoothly and could be controlled by just two fingers on the steering wheel, which was very free from road shock. A trifling tendency to oversteer (rear end swings out, front end noses in) could be provoked in violent cornering. The Plymouth is quite stable in turns, except for some skipping on very rough surfaces, and passengers are not rolled uncomfortably about.

This same high degree of stability held good during our fastest top speed run of 88.06 mph. The hardest efforts to get the springs to bottom resulted in failure. Dips taken at 70 mph were still taken in Plymouth's easy stride. The Plymouth ride is definitely superior to that of many, much more costly cars.

. . . Not to the Future

Although Plymouth's bodywork does not point to the future, there is much to recommend it. First of all, the windows are unusually large, making for excellent vision in all directions. The large wind-

shield has its corner posts located well back, so that the blind spot factor is almost nil. The rear window is also large and the rear-view mirror, placed high and well out of the way of forward vision, gives perfect coverage of the road behind the car.

Plymouth's are among the widest-opening doors in the industry: The rear doors open out through a full 90 degrees and the front doors open almost as wide. This, plus their large vertical dimension, makes entry and exit from the car easy and simple, even with your arms filled with luggage.

Speaking of luggage, the Plymouth's below-rear-deck area is smaller than that of a lot of cars. Nevertheless, it is big enough for all normal needs and it held, without strain, our load of road test gear which is a good burden for larger cars.

Although the Plymouth is a fairly short-wheelbase car, its seating capacity is right up there with the big jobs. Legroom in the rear seat is fine for a six-footer, equally good in the front. Headroom is of the

Cranking through a tight radius turn at 45 mph stressed Plymouth's suspension, proved it highly stable during high-speed cornering. Joshua trees in background are typical of sunny Southern California's "high desert" country

spacious limousine variety. Cigarette lighter and ashtray are located for the convenience of all front seat passengers and the aspect of the interior is one of quiet good taste and refinement: Attractive appearance without extravagance. The cloth of headlining and upholstery seems to be of very good quality; the "chair-height" seats give yielding but solid support; our test crew was as fresh after three days of cross-country driving as at the start.

The Plymouth body still retains such useful inheritances from the past as the manually operated cowl ventilator. Then, too, it's equipped with an up-to-the-moment heating and ventilating system which MOTOR TREND Research found adequate in near-freezing temperatures. The rear no-draft window sections leaked air badly, and were uncomfortable for passengers in cold weather. This was a matter which the dealer's service department could easily correct, and was the only air leak we could detect. The Plymouth body picked up a minimum of road noise, except when the car was traveling over coarse-gravel-and-tar pavement—there was a definite rumble then, as with almost all present-day cars. Fairly powerful cross-winds had little effect on our test car's stability.

There are ten body styles available in the '52 Plymouth line. Constant-speed electric windshield wipers are standard equipment and Solex tinted safety glass is available at small extra cost. In addition to reducing sun glare and saving your eyes, this glass also reduces interior temperature in hot weather and minimizes the fading of upholstery fabrics. Important safety assets are headlights of terrific penetrating power and an adjustable front seat controlled by an extremely positive lock.

Steering . . . Light and Right

Plymouth uses fine Gemmer worm and roller steering which requires only the slightest amount of correction when cornering and is highly positive on the straightaway. One trivial objection was noted: The two-spoke steering wheel was not installed so that the spokes would be horizontal in dead-ahead position. Instead, they lay askew, and we found this annoying although it did not affect control of the car.

Brakes . . . Fade Not a Problem

Plymouth hydraulic brakes—two cylinders for each front wheel, one for each rear—are very good. Bonded brake lining is used, giving an effective friction area

of 158 sq. ins. We found stopping distances to be quite good, in spite of "Hotchkiss-drive-hop." After repeated fast stops during acceleration trials, fade symptoms appeared, but were never serious—we could always stop and stop well. The brakes recovered their full efficiency after a minimum of rest—less than one minute. Plymouth brakes are good.

Performance . . . Not Hair-Raising

Plymouth's stock car racing record is one of the best, but its achievements stem from a combination of fair acceleration and top speed, plus fine cornering and braking characteristics, rather than from any one of these. Despite its small engine size—just 217 cu. ins. or slightly over 3.5 liters—Plymouth's climbing ability is very good and its torque curve stays flat high into the rpm range. The same applies, of course, to acceleration characteristics on the level—they're very decent, even above 60 mph.

During a rapid climb from 200 ft. elevation to 4300 ft., the engine temperature thermometer never reached the half-way mark, nor did it during the top speed and acceleration runs.

Transmission, Drive Train

Plymouth is one of the few current cars that is not available with an assortment of transmissions: This is clearly in the interest of the low-budget buyer and in the interest of the driver who does not need robots to control his own machine, although we have been informed that the

factory intends to make an optional overdrive available to Plymouth owners . . . an accessory which will add to Plymouth's operating economy.

The Plymouth clutch is hard (so is the throttle pedal) and the torque tube-less Hotchkiss drive, combined with light crankshaft, light flywheel, and light rear springs causes the engine almost to stall when the clutch is not let out slowly. There is nothing wrong with Hotchkiss drive that inexpensive torque-arms could not correct, and MOTOR TREND Research looks forward to the day when all Hotchkiss layouts will be reinforced in this way.

The transmission gears of the Plymouth tend to clash badly during normal, fast shifting from Neutral to Low. We found that this effect can generally be avoided if the clutch pedal is depressed four or five seconds before the shift is made. Really fast shifting is not easy with the Plymouth, due to the stiff clutch spring and rather "sticky" shift mechanism. There is room for improvement here.

Geared for Speed

You can have your choice of 3.9 or 3.73:1 rear end gears in the Plymouth. The 1950 model tested by MOTOR TREND Research in the March 1950 issue of this magazine was equipped with the low-speed, fast-acceleration 3.9 gears, while our '52 Cranbrook used the high-speed 3.73 alternate. A performance comparison of these otherwise almost-identical cars is enlightening:

(Continued on page forty-two)



Unusual ease of entry and exit is one of Plymouth body's big assets. "How high are 'chair-height' seats?" is the question which is answered in this photo



Cerny's magic touch transforms Chevrolets into Oldsmobiles

Photos by Eric Rickman



George's Four-Door



Carlo's Two-Door



MODIFICATIONS . . . George Cerny's Four-Door Chev-Olds

Basic car—'49 Chevrolet four-door Fleetline sedan.

License-plate bracket and guards—'50 Chevy. Grille—Top bars are '50 Oldsmobile 88. Lower bar, '47 Oldsmobile 98, was added to fill space that Oldsmobile 88's bumper formerly occupied.

Headlights—Frenched.

Hood—Filled. Sheet steel (20-gauge body stock) added to conform to top bar of grille.

Windshield—'50 Oldsmobile 88. Chevrolet division bar was cut out.

Chrome—Fender strip stock. '50 Pontiac rear-door window molding added for decorative effect. Guards under door handles are '50 Cadillac.

Hub caps—Cadillac.

Rear fenders—Front half, stock. Rear half, '50 Cadillac. Gas-tank filler cap relocated in tail light. Bottom of fender and skirt were lowered by adding three ins. material.

Rear bumper—Stock '49 Chevrolet with deluxe tips.

Road clearance—Lowered 3 ins. in front by cutting approximately $1\frac{1}{2}$ turns from coil springs. Lowered four ins. in rear by de-arching rear springs.

Engine—'50 Oldsmobile 88. Semi headers, dual exhaust, Cadillac carburetor. Drive is through Hydra-Matic. Rear end gears are from '50 Olds set in '40 Pontiac housing.

Upholstery—Fabrilite. Headlining, panels in

seats, pads on floor carpets are all off-white. Seat panels are channeled. Trimmed inside in jet black. Carpets are from Ford Crestliner.

Appointments—All metal except instrument panel has been chromed, including bottom of arm rests, heater, glove compartment door. Price of plating—\$70.

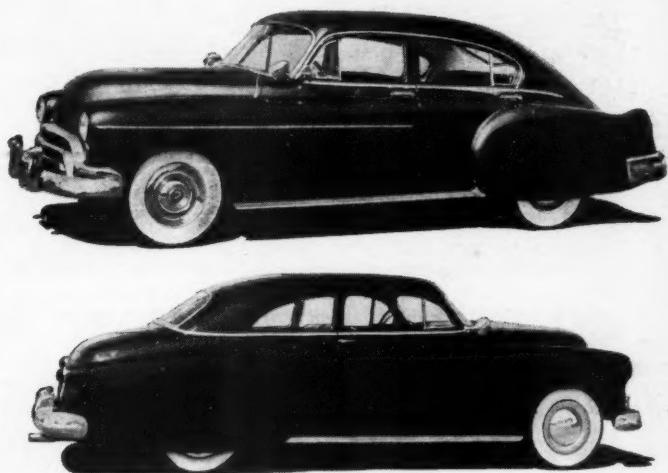
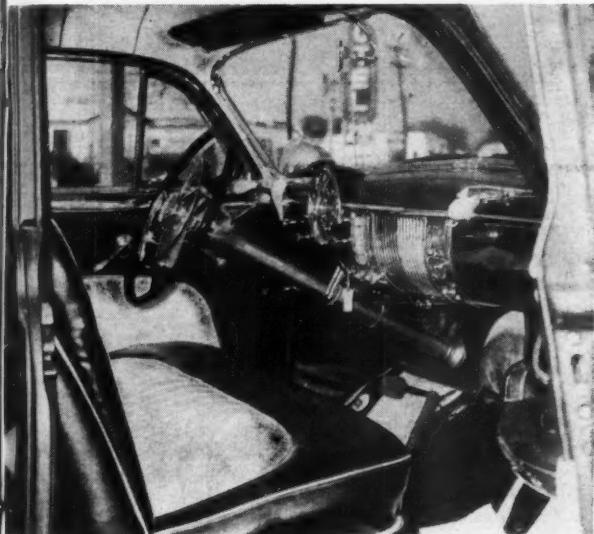
Instrument panel—Instruments are stock. Knobs on controls are from Oldsmobile.

Time required to build—Two months' spare time.

Color—Metallic green lacquer.

Cost (if built for a customer)—\$1,000.

Work done by—George Cerny in the body shop he and his brother, Carlo, operate.



MODIFICATIONS . . . Carlo Cerny's Two-Door Chev-Olds

Basic car—'49 Chevy two-door Styline sedan.

Grille—Top bar, '50 Oldsmobile 88. Floating center bar, '51 Oldsmobile 98.

Gravel pan—Reworked stock part to fit ends of top grille bar.

Hood—Same as George Cerny's car.

Headlights—Frenched.

Windshield—'50 Oldsmobile 88.

Chrome—Car almost completely dechromed.

Hub caps—Specialty made for car.

Rear fenders—Front half, stock. Rear half, '50 Oldsmobile 98. Three ins. added to bot-

tom of skirt and fender.

Deck lid—Squared off in rear by re-shaping the original part.

Top—Chopped three ins. in front, four ins. in rear. As a consequence, the rear quarter window had to be made shorter and narrower to fit the new shape. In addition, the front doors were rounded-off on the top forward corners and the window post was slanted forward $1\frac{1}{2}$ ins. at the top.

Road Clearance—Same as George Cerny's car.

Engine—Stock '49 Chevrolet.

Upholstery—Headliner, maroon mohair. Seats and door panels, maroon and off-white Fabrilite. Carpet, Chrysler.

Appointments—Same as George Cerny's car. Time required to build—Three months' spare time. One month was required for chopping the top and doing the necessary extra work.

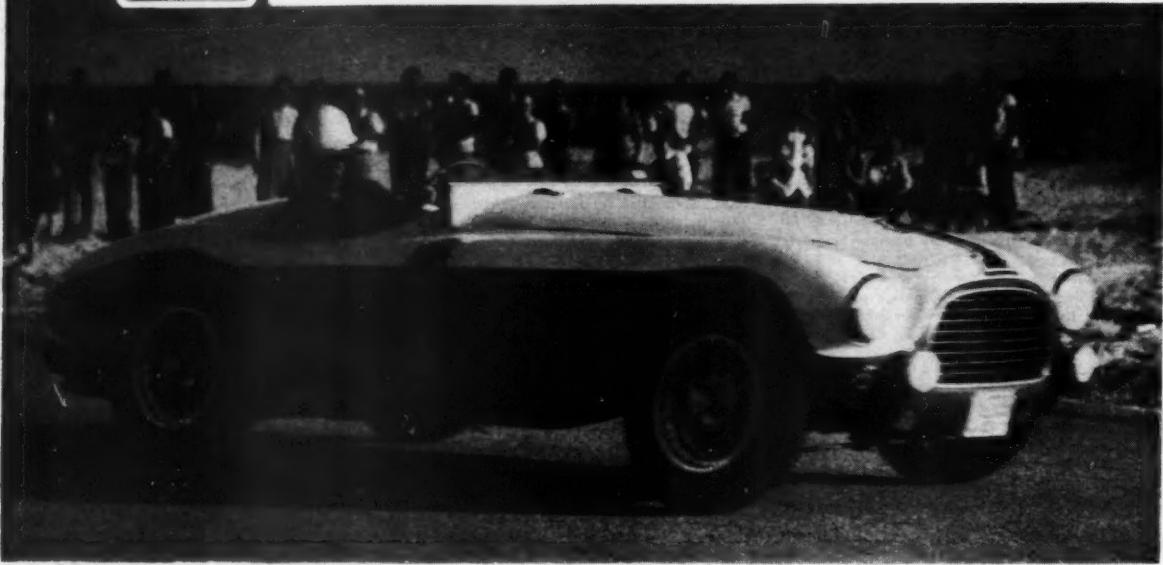
Color—Metallic maroon.

Cost (if built for a customer)—\$1,500.

Work done by—Carlo Cerny in the body shop he and his brother, George, operate in Los Angeles.



Ferrari



John Fitch roared to victory in Bill Spear's Ferrari America in last December's Palm Beach Shores road race. This car's 250 cu. in. engine puts out 220 bhp

PHOTO BY RICHARD SCHULTZ

TAZIO NUVOLOARI'S name and his flamboyant racing style focused the excitement of the hordes that jammed Roosevelt Speedway on October 12, 1936 to witness the great revival of the Vanderbilt Cup Race. The dark, grimacing, little Italian seemed to violate all the laws of gravity and centrifugal force as he hurled his Alfa-Romeo down the home stretch to win a rare, truly international, American grand prix race. That magnificent stylist, Jean Pierre Wimille, followed in a Bugatti, and Brivio's Alfa took third. The words, "Alfa-Romeo," added up to overwhelming superiority in the public's mind; though the name of Enzo Ferrari was known to just a few alert enthusiasts who had access to the pits.

But it was *Scuderia Ferrari* that had entered the Alfas, hired the best drivers, and ran the best machines; it was Enzo Ferrari who had prepared the cars, schooled their pilots, and had run the pits. He was an important man, even then, but he was still learning the racing game, to which he'd been wed since 1920.

Today, rich with the know-how of 32 years of management of high-strung machines and men, Ferrari has become the name to be reckoned with on the racing

circuits of the world. Mercurial, inspired, autocratic Enzo rules his tiny works at Modena and Maranello with the kind of dedicated attention to detail that hasn't been seen since Bugatti was *Le Patron* of Molsheim. But with Enzo there is none of Ettore's affection for clothes, statuary, carriages. There is just one interest—CARS.

A close friend says, "Every part that leaves the factory has Ferrari's fingerprints on it. Every letter has his signature, every order his authorization—and each of his cars has the mark of his genius." The iron control of the veteran race-manager pays: The Ferrari *America* is the fastest sports car in the world. The *Inter* and *Export* models are probably the most flexible high-speed machines being built today. The Formula I Grand Prix racing cars are shattering Alfa-Romeo's supremacy. And his Formula II cars are practically unbeatable.

Enzo's schooling began back in 1920, when he started racing Alfas on all the continental circuits. In '28 he "retired," opening a small garage in the north Italian town of Modena. In '29, the Alfa factory gave recognition to his ability by assigning their racing stable to his manage-

ENZO'S V-12'S ARE BUILDING A SPEED LEGEND IN THE POST WAR WORLD

BY MICHAEL BROWN

ment, at which time *Scuderia Ferrari* came into being.

Enzo's judgment proved unerring in every way. He laid the foundations of his stable with first things first: the finest mechanics he could find, admitting that these unsung heroes are the primary sources of victory. Next came the obvious heroes—the drivers. Enzo gathered the greatest talent about him: Nuvolari, Trossi, Farina, Pintacuda, Brivio, Varzi, Chiron, Sommer, Villaresi, for a few. And of course the conductor of this thundering symphony orchestra was Ferrari himself. Races in two countries on the same day were common; races on two continents at the same time weren't rare. But all day and all night lights burned in the little office in Modena while tireless Enzo master-minded countless victories until the

Middle Thirties when *I Tedeschi*—the Germans—swept all opposition aside with their lavishly financed, magnificently engineered machines.

There were some lean years for Alfa but, in '39, Enzo sparked the construction of a 91 cu. in. supercharged machine. Engineer Iano, with Giacchino Colombo at his side, created the car and two experimental models made history in the 1940 *Mille Miglia*. Then came the war and Enzo converted his shops at Maranello to tool-making.

During that conflict, in spite of bombings which amputated wings of the factory, all spare time was devoted to thoughts of the peaceful years to come, and to cars that would truly go. A scant few days after peace was declared, reconstruction of the destroyed portions of the plant was begun and what *The Motor* of England refers to as "The Age of Ferrari" was born.

Fresh in our minds today is the eloquent demonstration of engineering superiority by the two Ferrari cars in the Second *Carrera Panamericana*. This news had scarcely cooled when a Ferrari *America* took the winning checkered flag in its stride at the Palm Beach Shores, Florida sports car race. The machines that won in Mexico had engines of a mere 150 cu. in. displacement (smaller than the engine of a Nash Rambler), while the *America* boasts 250 in.—a bit smaller than a '51 Mercury engine. These are just two of the many types of cars—all superb—that emanate from the Maranello factory.

HERE IS THE STORY OF THE NEWEST MARQUE OF GENIUS

The development of the somewhat confusing variety of Ferrari models shows a unique combination of, on the one hand specialization of design to fulfill a specific function, and, on the other hand, flexibility of design great enough to permit adaptation of a single engine to both sports and Grand Prix use. When Ferrari built his first 4.5 liter (275 cu. in.) unsupercharged GP car—the same design that was so successful last season—all "serious" competition, meaning primarily Alfa-Romeo, was in the form of 1.5 liter (91 cu. in.) blown engines. But he decided to work with the larger, less specialized displacement permitted by Formula 1 because, again like Bugatti, Ferrari is much concerned with translating GP experience into techniques that can be applied to the production of

(Continued on next page)



PHOTO BY RODOLFO MAILANDER

Familiar sight in European road racing—another Ferrari victory. This photo shows Villoresi winning the 1951 Mille Miglia—the Italian classic



PHOTO BY E. RICKMAN

Fine equipment can be no better than the men who make it work. Villoresi, Ascari, Chinetti, and Taruffi piloted the Carrera Panamericana Ferraris



Mexican road race-winning car in front of Modena factory. Enzo Ferrari says that this brand new, Vignale-bodied "212 Inter" tested at 132 mph

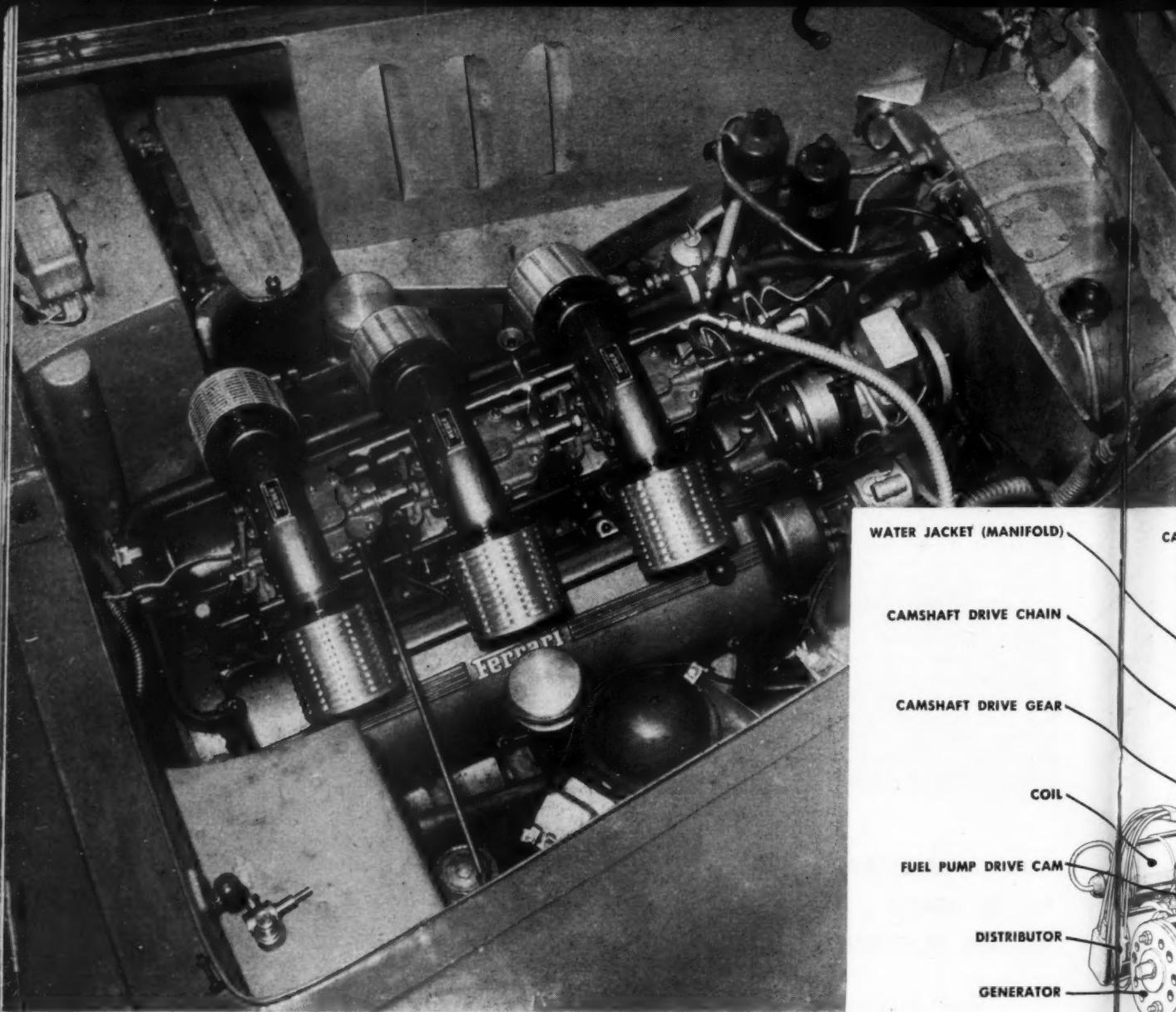


PHOTO BY E. RICKMAN

touring machines. That his decision was a wise one is proved by the facts: the 4.5 liter GP car and the *America* 4.1 liter sports car, each a smashing success in its field, are derived from the same basic engine.

These cars are both members of one of the two distinct family lines in the Ferrari genealogy. The other, and older, line of which the Mexican road race-winning Type 212 is one of the more recent descendants, is a striking illustration of the Ferrari practice of producing a number of specialized variations on a single mechanical theme. These first Ferraris, produced with the aid of Engineer Colombo, now with Alfa-Romeo again, were a 1.5 liter, blown racing job and a two liter (122 cu. in.) unblown sports car. Both were V-12s,

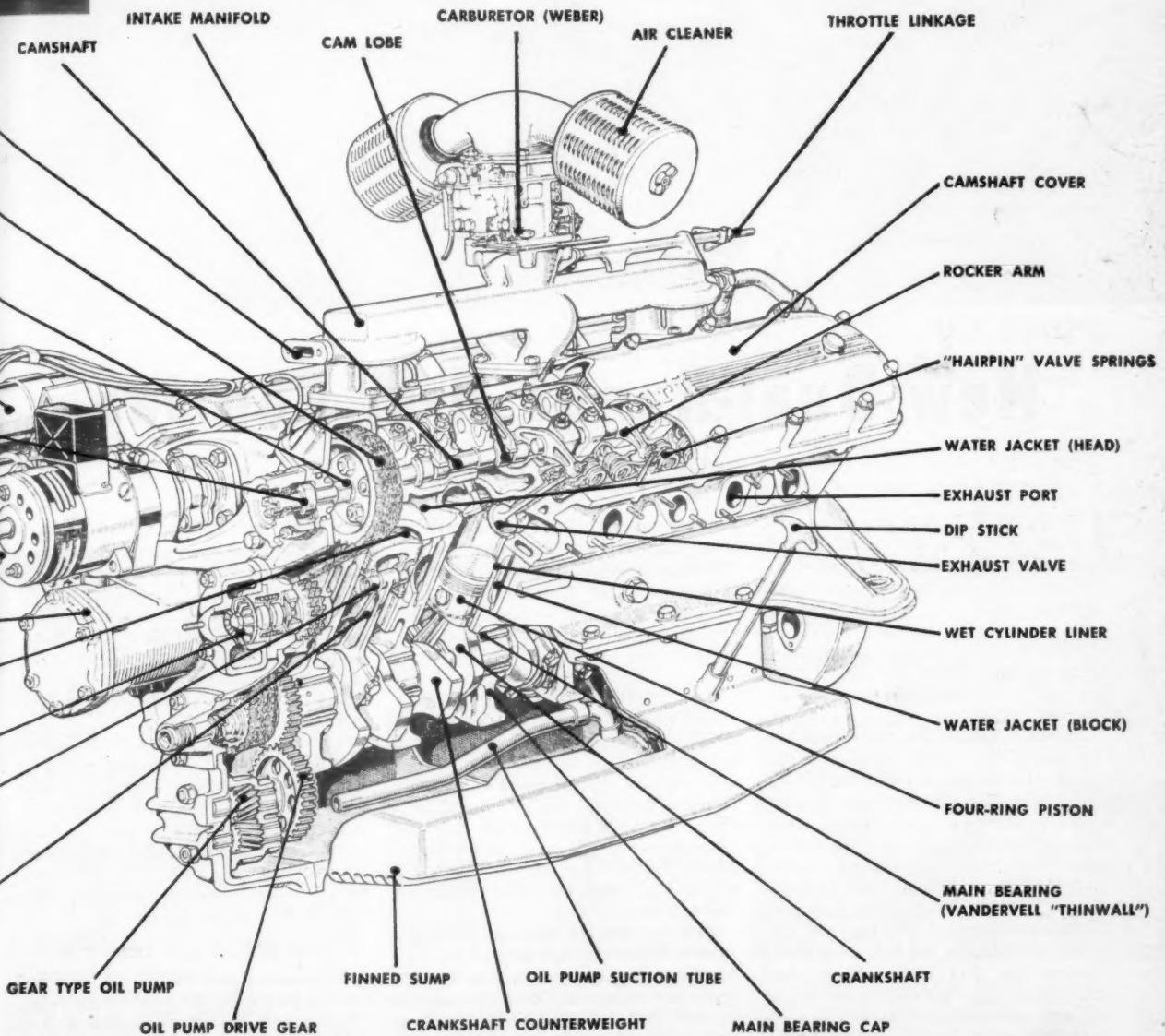
both were quite similar in conception and execution. The sports car had a longer chassis and conventional axles, the racing car had an extremely short chassis and swing axles. The racing car, excellent though it was, was short-lived. But the sports car became the basis for the several *Inter* and *Export* models, all of which use the same crankshaft and cylinder blocks, but different pistons and cylinder liners. The first modification of the two liter car, bored to 2.3 liters for better acceleration at low speeds, was entered in—and won—the 1950 *Mille Miglia*.

But right at this point there was a major revolution in the Ferrari hierarchy. Colombo left the organization and a brilliant young engineer named Lampredi took

(Continued on page forty-three)

Ferrari

Cutaway shows the Ferrari V-12 engine in single carburetor form, naming the individual components which make up the renowned and prize-winning powerplant; photo is of three-carb version used in Mexican road-race cars





TESTING THE

New Dual-Range H-M Pontiac

PHOTOS BY ERIC RICKMAN

IT'S BEEN A LONG time since anything as good as the "Dual Range" Hydra-Matic transmission happened to drivers who like automatic transmissions. At a time when many manufacturers are concentrating on making things more comfortable for the driver—making them actually "drive" less and less—Pontiac has made their automatic transmission less "automatic."

As paradoxical as that may sound, MOTOR TREND Research is not alone in the opinion that this new transmission has terrific potentialities. For instance, the engineer of another automotive manufacturer paid an unexpected tribute to the Pontiac when, during a conversation, he stated that "The 'Dual Range' Hydra-Matic transmission is one of the biggest things to happen to the automotive industry this year."

It's undoubtedly the best compromise between the stick shift and the fluid coupling; it has the "shifting ability" of the one, combined with the ease in shifting of the other. Merely "by the flick of

a finger" you can shift back and forth between third and fourth, giving you the advantage of engine braking, at the same time allowing you to accelerate upgrade without fear that it will automatically change to fourth as you're trying to pass another car.

Improved Transmission

This new, optional "Dual Range" Hydra-Matic is the major difference between last year's and this year's products; style-wise and mechanically the two cars are basically the same. Along with the new Hydra-Matic, a higher speed rear axle (3.08 instead of 3.63:1) is used, the combination of the two giving you more punch in traffic, a higher top speed, and better fuel economy.

Now that you can manually shift from third to fourth and back again, it provides a greater flexibility in driving through traffic and mountains. With the selector in the upper, or "cruising," range of DRIVE, the transmission automatically

goes from first to second, to third to fourth, staying in fourth until you stomp the throttle or move the selector back to the lower, or "traffic," range of DRIVE.

In the "traffic" range, the transmission goes through first and second to third, staying there until you punch the throttle (changing to second). This range gives you both more "go" in traffic and more engine braking.

Another change has been made in the low range of the transmission, which is set up so that the transmission starts out in second gear. If you're on a grade or in sand and need that first gear, you still have it by pushing the gas pedal to the floorboard. Being able to start in second gear is a boon to those motorists who have to drive on icy roads.

Ride and Steering Above Par

The steering and ride of the '52 Pontiac are both good compromises. Although "compromise" has the connotation of "average," that's not the intention here. The



GREAT SPORT—Splashing through water like this is not only fun; it proves that the engine can take a dunking without drowning out in the process

ride is just right, and even rear-seat passengers all agreed that its comfort was equal to a front-seat ride—you aren't pitched from one side to the other when you go around sweeping and turning roads.

Over washboard roads, some steering wheel vibration was noticed; but since no heavy shock is ever encountered, this is not considered really objectionable.

Fuel Economy Improved

You will be able to save money in fuel bills with the "Dual Range" Hydra-Matic transmission. In every instance where the "cruising" position of DRIVE in the transmission was used, fuel consumption was decreased. Improvements up to as high as five mpg were made under one condition, at a steady 30 mph.

In the "traffic" position, fuel economy is naturally not as good, but you generally

have to sacrifice one thing for another—in this case, economy for the added acceleration and the decrease in brake wear.

Accelerates Faster

Acceleration of the 1952 Pontiac is much better—the result of increased bhp and the new transmission. Pick-up was tried using DRIVE only, then LOW, followed by a mechanical shift to DRIVE around 30 to 35 mph. The difference between the two methods was not noticeable, except in actual stopwatch and fifth wheel checks (see "Table of Performance").

Acceleration in both the 10 to 60 and 30 to 60 mph ranges was better than last year's car. In the 10 to 60 mph checks, we cruised along in second gear (automatically adjusted to do so) then stomped hard on the throttle. It shifted to third automatically around 32 mph and remained there until we hit 60 mph. In the 30 to 60 mph checks, the transmission jumped to third and stayed there through 60 mph.

Top Speed Higher

When driving the Pontiac at high cruising speeds from 65 to 75 mph, no wander is noticeable. The car stays on a steady course and you don't have to make constant corrections. This makes it easy to drive the Pontiac as fast as conditions allow with no fear of tiring or losing control . . . a good feature especially on long-distance trips.

On our two-way high speed runs, we were quite concerned when the speedometer needle went up to only 78 mph and stayed there, regardless of what we tried to do. We estimated that the car was doing at least 90 to 95. We weren't far off in our estimate: the fastest one-way run was 95.24 mph, while the average of the four runs was 92.88 mph. Undoubtedly,

the higher speed rear axle, in combination with six more bhp, is responsible for this increased speed.

Brakes Fade Some

One of Pontiac's features that is not up to the standard of the others is the brakes. The brakes feel sure and positive, but evidently the loading per square inch of brake lining is too high to give short stopping distances. As in last year's tests, we had to give the brakes time to cool off during our hard slamming stops and during the repetitive acceleration runs. After we noticed the brake fade, we allowed a few minutes for cooling off, and they returned quickly to normal.

No Major Styling Changes, Just Refinement

Since the 1952 Pontiac is basically so close to the previous year's model (MOTOR TREND, Sept. 1951) both chassis and body-wise, there is no point in discussing this in detail. Features we like about the interior and body are: the construction and finish; the capacity of the trunk compartment and its accessibility; the new type jack; the controls, which are all within easy reach; the comfortable seat; the easily read instruments; and, the optional, tinted windshield.

The trunk in the 1952 Pontiac has several good features. It is roomy, it has two hold-down springs for keeping tools in place and has a box furnished with it for holding the new type tire jack. This jack, we feel, is a good improvement over a bumper jack except for the fact that it takes more leverage to operate. You place it under one side of the car, using the locating rod to determine the proper position for placing the jack so that it will lift directly on the frame, then crank. It

(Continued on page forty-five)



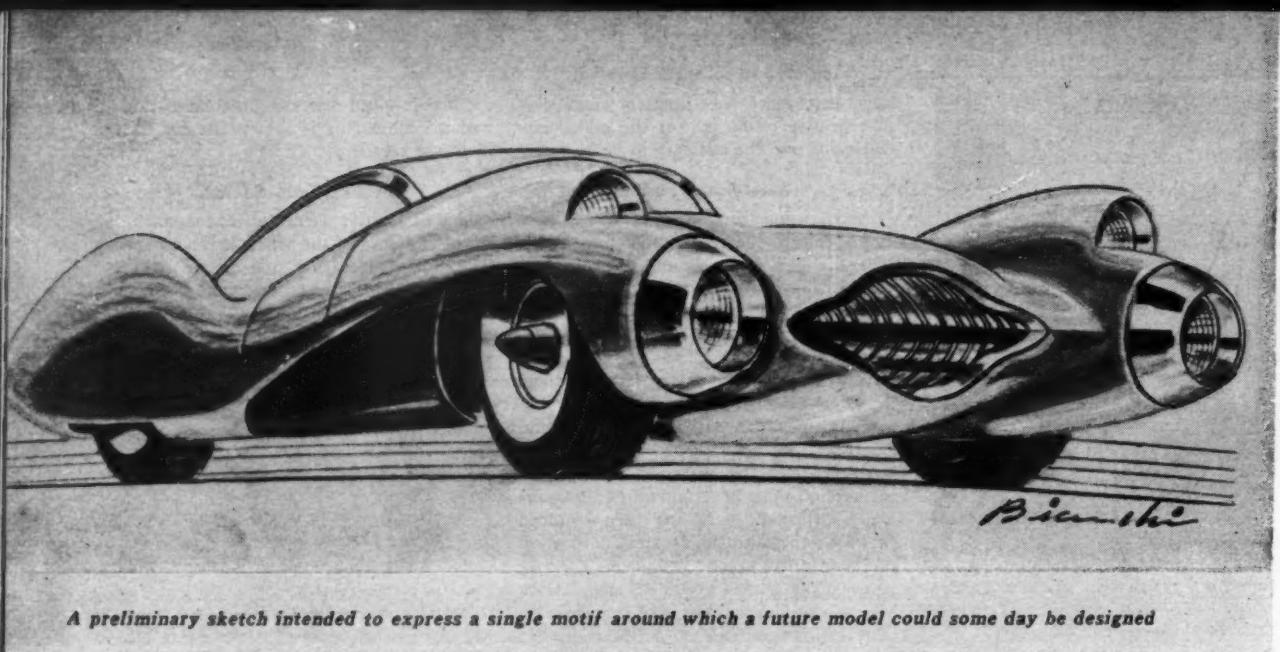
ACCURATE STOPS—The combination of a mercury switch on the brake pedal and a brake detonator, firing a chalk pellet onto the ground, gives you the "actual brake stopping distance"



FUEL CHECKS—Fuel checks are made as accurately as possible, using a .1-gal. consumption meter, fifth wheel and a gradient indicator. If a climb or descent is indicated, figures aren't used



SPEEDOMETER—For finding speedometer correction, for fuel consumption, acceleration, and brake checks, the combination of fifth wheel and accurate Weston Electric speedometer is used



A preliminary sketch intended to express a single motif around which a future model could some day be designed

...through a glass, darkly

IF, WHEN YOU LOOK at the modern-day cars, you get the idea they haven't changed much over the last few years, you're not far from wrong. Car changes must come gradually—the public, as a whole, just doesn't want to accept radically new concepts in styling.

This doesn't mean that auto stylists aren't looking ahead. At Ford Motor Co., for example, advance stylists are peering way into the future. The ideas they sketch on paper are not necessarily

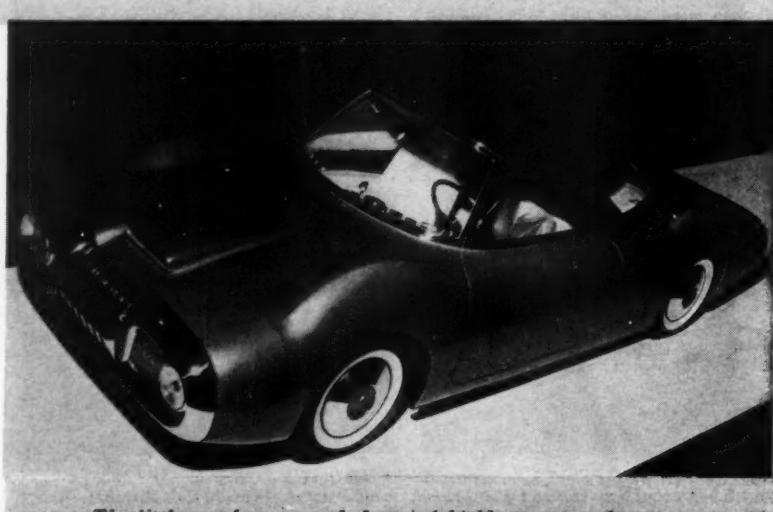
practical ones, but are the formulation of a theme or motif. This is what helps to create a better product—the search for something new and different.

On these pages are a few of these sketches transformed into the $\frac{3}{8}$ -scale model stage. Some may get into the detail planning stage, but it is more likely that not one will ever poke its nose out of the Ford Styling Department.

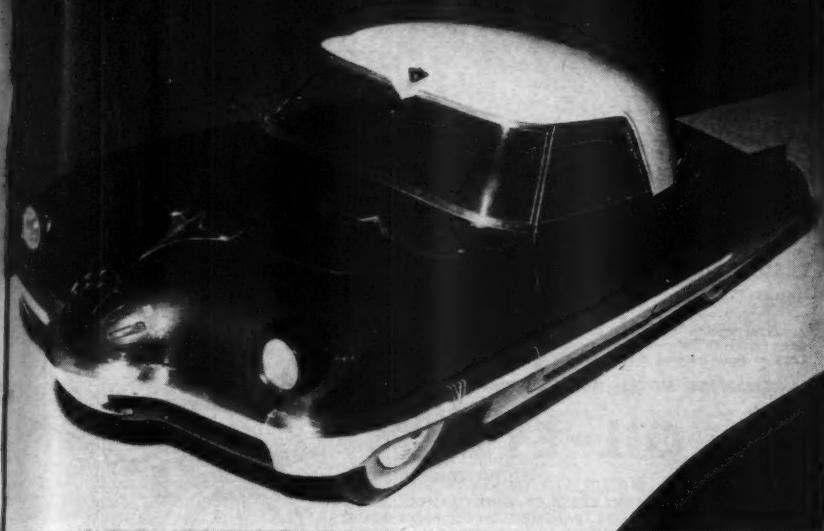
Would you buy one if it did?

**FORD'S ADVANCED
STYLISTS HAVE
ONE PERMANENT
ASSIGNMENT . . . TO
GUESS THE FASHION
OF THE FUTURE**

*photos courtesy of
FORD MOTOR CO.*



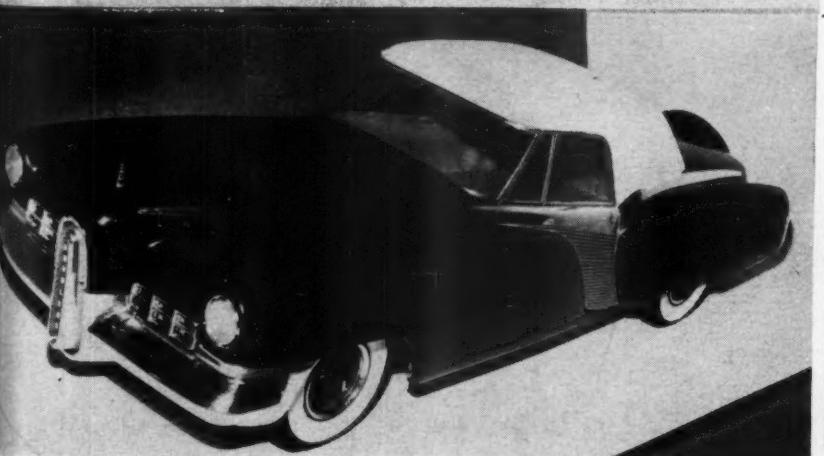
The little numbers around the windshield are a speedometer. Black light from knob in center flashes on proper number.



Circular grille covers round radiator, theoretically more efficient than traditional rectangular shapes. Creases in side of model are for show only.



Reminiscent of the Chrysler Newport, this body is a handsome conception. Doors are seldom made in clay since their exact location can't be estimated.



Semi-classic lines, imitation wickerwork are strange sights in a car of the future. This was last design rejected before Lincoln 195X was made.

Don't Miss!

COMPLETE BUYER'S GUIDE

In the May MOTOR TREND
An extensive survey of all 1952
American-made Cars.

Plus! TWO ROAD TESTS

A subscription to MOTOR TREND
will assure you:

- ✓ Early delivery of each issue to your home or office.
- ✓ Each issue, don't take a chance on your dealer being sold out.
- ✓ Time saved. No need making a trip to the newsstand each month.

ENTER YOUR SUBSCRIPTION TODAY!

MOTOR TREND Subscription Dept.
1015 South La Cienega Boulevard
Los Angeles 33, California

Please enter my subscription to
MOTOR TREND:

Check one (/)

- 1 Year (\$3.00) Cash Check M.O.
2 Years (\$5.00) Cash Check M.O.

Name.....

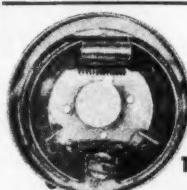
Address.....

City.....

Zone..... State.....

(PRINT—do not write)

MIDGET WHEEL CYLINDERS



1" by 1 1/8" Overall
3/4" bore

Uses Lockheed Wagner parts

For use on any car 500 to 2500 lbs. Easily mounted on any backing plate. Thousands in use. Complete kit for Crosley 39.95.

M. V. RYAN

3844 Duane Way, South Gate, Calif., LOrain 6-3698

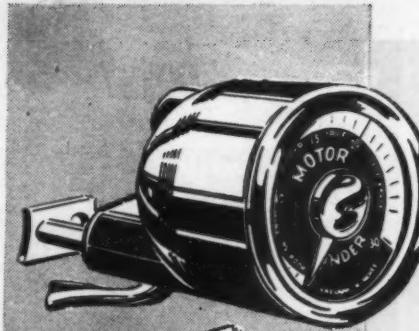
GET 150 MILES PER GALLON

AS PROVEN BY ENGINEERS!
The Spark Intensifier is only one of many ways to get "peak" performance. We guarantee results or it costs you nothing!

- ✓ Quick starts on cold mornings
- ✓ More Power ✓ Better Mileage
- Easily installed in the center hole of the distributor cap of all cars, trucks and tractors, the intensifier boosts the high voltage passing through the distributor... giving a "hotter spark."
- FREE TRIAL, send \$2.00 cash, check or money order . . . if not fully satisfied, return for full refund.



ELECTRONIC DEVELOPMENT CO.
Dept. MT-4, Box 17716, Los Angeles 34, Cal.



Drive Scientifically and SAVE!

Beautifies your dash board as it benefits your engine.

THE ORIGINAL STEWART-WARNER DE LUXE MOTOR MINDER

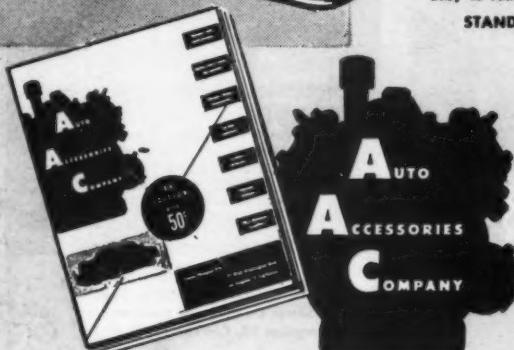
saves ON gasoline, oil and
engine repairs, makes your
driving EASIER & BETTER

FITS ALL CARS, READY TO INSTALL

\$13.95

STANDARD MODEL—NOT ILLUSTRATED . . . \$10.95

Analyzes engine condition and shows how to
get the most power in every driving range.
Easy to read colored dial indirectly illuminated.



HEADQUARTERS FOR THE

WORLD'S FINEST SPEED,

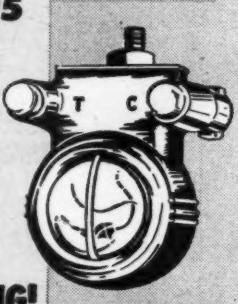
POWER AND CUSTOM EQUIPMENT

OIL-EYE

POSITIVE OIL INDICATOR

CONSTANT CHECK OF YOUR CRANKCASE AND
AUTOMATIC TRANSMISSION OIL FOR AMOUNT
AND CONDITION WITH A PUSH OF A BUTTON.
SINGLE UNIT CHECKS CRANKCASE ONLY.

DOUBLE UNIT . . . \$16.95
SINGLE UNIT . . . \$12.95



NEW! COLORFUL! BIG!

The most modern automotive catalogue
ever presented. Sections on Speed, Power,
Gauges, Exhaust Systems, Custom
Chrome, and many others, from the nation's
leading manufacturers. The highest quality
merchandise at the lowest prices.

**SEND
TODAY
50c**

127-T West Washington Blvd., Los Angeles 15, California

Phone PROspect 9701

YOU CAN TELL THESE BOOKS BY THEIR COVERS

SHARP, COLORFUL COVERS LEAD RIGHT INTO VALUABLE FACTS AND SOLID ENTERTAINMENT ON EVERY PAGE OF THESE HISTORY-MAKING AUTOMOTIVE BOOKS!

HUNDREDS OF TERRIFIC PHOTOS AND KNOCKED-OUT IDEAS MAKE EACH BOOK A PRIZE PACKAGE OF INFORMATION AND ENJOYMENT—

LOOK FOR THESE NEW BOOKS AT YOUR NEAREST NEWSSTAND!

ON NEWSSTANDS EVERYWHERE

If your dealer cannot supply you, send 75¢
each for your copy to address below.

TREND BOOKS.
5959 Hollywood Blvd., Los Angeles 28, Calif.

I enclose \$. . . for: HOT RODS
 CUSTOM CARS HOW TO BUY A CAR

NAME . . .

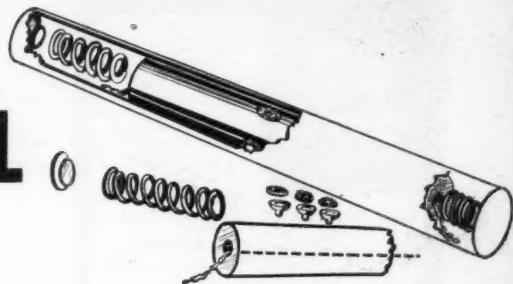
ADDRESS . . .

CITY . . . ZONE . . . STATE . . .



GYRO SKID CONTROL

BY FRED BODLEY



... there at the base of the mountain, where the road swung sharply right to cross the narrow bridge, shone a sudden glassy slickness. The brakes! And then I was upon it. There was the moment of sick surprise when the rear end lurched out and around, the instinctive turn into the skid—too slow, too slow. Sideways on the slippery blackness I went forward to the springboard which would launch me into the drink. And then . . . a blast of wind smashed against me broadside, checked me almost to a halt . . . the wheels found traction and the hundred horses galloped terrified across the narrow string to life.

"For heaven's sake," snorts my favorite critic at this point, "what are you doing . . . a little number for Awful Confessions?"

"Okay, okay," I counter smartly, "I was just getting around to asking these jokers: 'Do you drive a car with built-in miracles?'"

Well, do you?

Matter of fact, I guess we all ride our luck a bit in the course of a year's driving. It's a tribute to Detroit engineering and *some* common sense on the highways and a lot of luck—that our accident rec-

ord isn't ten times worse than it is. Lest I find myself distracted by this slightly left-handed praise, let me hasten to point out that our record allows for no complacency. We must be forever alert to ways and means to improve the safety of civilization's most dangerous path—the broad highway!

Which brings us to Gyro-Skid Control. For here is another of the really valuable safety contributions to the automobile.

Like so many goodies in this life, Gyro-Skid Control is a simple "Thing"—that's what they called it at Indianapolis)—so simple, in fact, that the best comment was heard from our graybeard editors: "It should have been invented ten years before the automobile." It's a tube three inches in diameter, 40 inches long, weighing 50 pounds, and it fastens securely to the rear frame member of your car. Inside the tube is a heavy steel weight mounted in ball bearings. For every action of the car there is a resulting reaction by this weight, keeping the car constantly stable.

As every kid who ever took high school physics knows: "Every action is accompanied by an equal and opposite reaction."

Cutaway of simple, but active control shows internal components: spring-loaded weight immersed in oil and floating on ball bearings. Many top racing drivers swear by this device

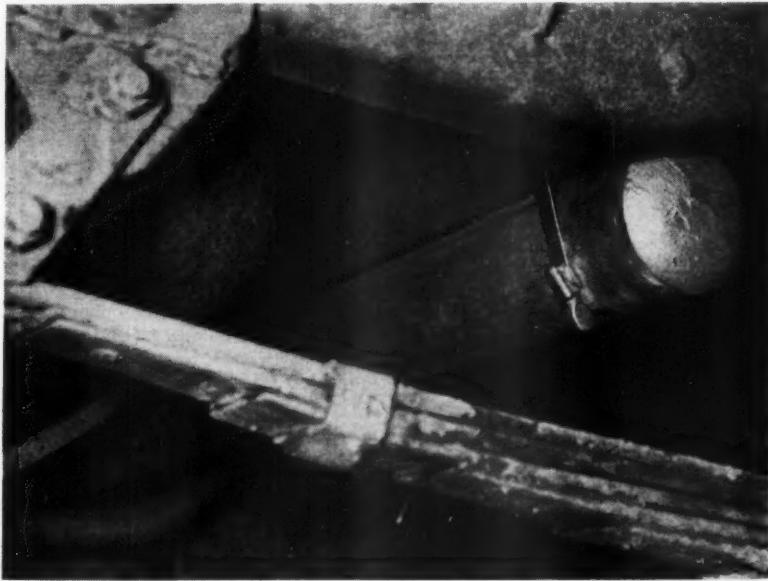
Gyro-Skid Control, employing this law, counters the action of uneven weight distribution within the car by means of counter centrifugal force. To put it in a nutshell, the centrifugal weight which causes the unbalance or skid. Simple?

Walt Faulkner used the Gyro-Skid Control in the last 500 when he hung up the fastest lap record in history, and that little red and yellow job took the Indy turns as if it were on a rail. Troy Ruttman used Gyro on the Carrera when he gave the Ferraris a run for it through those mountains. Johnny Mantz has used it for the past year to get through his turns like a bomb. Any of the boys who drive the fast ones will tell you that it's great.

We put it on the Merc . . . quickly, easily. And we gave it a real workout before the recent California dew session and during same. Believe me, it was pleasant to have that extra feeling of security during the Chamber of Commerce blackout. Here is what I found with Gyro-Skid Control:

Skidding on wet or slick pavement is amazingly decreased, tire squeal in turns on dry pavement are cut by at least 20 per cent. There is a feeling of *stability* and *mastery* of your car in any emergency quick maneuver. If your car is a hopper when going around a fast turn, Gyro just flattens her out and holds her steady. It eliminates horizontal vibration and gives you a nice, easy ride. But to get back to the big deal, that ever-present control of weight distribution gives you a safe, happy, carefree ride. One note of caution seems in order after all the nice things. Gyro is effective as long as the front wheels are not broken free; when that happens you shouldn't a done it.

The Gyro-Skid Control will last the life of the car and can be easily transferred from one car to another when you get ready for a trade. It is reasonably (we believe) priced at \$39.95, you will be able to find it at your favorite dealers shortly, and it can take the place of a lot of luck in a lot of our driving. For my money that's a pretty fair solution to a very big problem. Simple, no?



Anyone can install the Gyro Skid Control and the only tool necessary is a pair of pliers. The tube is attached to rear frame cross member to keep balance

BE FIRST
WITH
PORTER

ALL
MUFFLERS
MADE WITH
3/4" 16 GAGE TUBING
STEEL PACK OR
HOLLYWOOD TYPE
SINGLES FOR ALL CARS

Ford and Mercury Duals

1935 to 1948.....	25.30
1949 to 1951.....	27.50

Chevrolet Duals

1937-'51 (with exchange manifold), 48.00
Refund of \$15.00 upon return of your
manifold. No Chevrolet convertible duals.

Plymouth and Dodge Duals

1942-'51 (with exchange manifold), 53.00
Refund of \$20.00 upon return of your
manifold. No Ply. or Dodge convert. duals.

Studebaker V8 Duals

Standard transmission.....	33.00
Automatic transmission.....	33.00

Oldsmobile Duals

#1-1949 to 1950 "88-98".....	33.00
#2-1951 "88".....	33.00
#3-1951 Super "88".....	33.00
#4-1951 "98".....	33.00

Cadillac Duals

1949 to 1951.....	33.00
All prices f.o.b. Los Angeles, California	
PLEASE SPECIFY YEAR AND MODEL	

Dealerships Available

Porter Muffler Mfg. Co., Inc.
11820 W. OLYMPIC BLVD.
LOS ANGELES 64, CALIF.

Send for our free catalogue
Dept. MT-4

CHEVROLET

Owners Manual

Brand New! Gives you all you need to save money on repairs, prevent trouble, enjoy care-free driving, increase trade-in value, get the best from your car at all times. 288 pages, over 300 photos, diagrams, tables, charts, breakdowns, plus clear, easy-to-read text makes everything simple. Written by Ed Packard, with General Motors, this amazing manual shows you everything: how to diagnose Chevy troubles (on any model!) by feel, sound, smell, all-around performance; what to look for, trouble shooting, how to get value from garages. So complete—mechanics use it. Yet so simple—young kids get it. Hurry—get your free trial copy now. One minor repair saved and it pays you 10 times over! Send no money—pay postman only \$3.50 (plus postage); or save postage by sending \$3.50 now. Full refund in 7 days if not “tickled pink”!

Popular Mechanics Press
Dept. MT-10, 200 E. Ontario St.
Chicago 11, Ill.



Spotlight on Detroit

(Continued from page ten)

though C. F. Arnold, Cadillac's Chief Engineer, says they do not affect the bhp.

Mr. Arnold explains the hp gain in this manner. "Start with 160 bhp in the 1951 engine, then add 15 for carburetion, 9 for a new cylinder head with $\frac{1}{2}$ inch larger exhaust ports, 2.5 for a new exhaust manifold, and 3.5 for a new intake manifold."

Major exterior styling change is to be found at each corner of the rear bumper where the dual exhausts are brought out in jet-pipe fashion. To highlight a half century of automobile manufacturing, Cadillac is displaying the *Eldorado* convertible and the gold-plated *Townsman* sedan, both especially created.

The convertible may be produced later in the year, and many of its style features have been borrowed from GM's *Le Sabre*. For example, the body has been lowered two inches, twin exhausts emerge below the tail lights, a larger one-piece windshield is identical with its prototype, and automatic radio antennae project from the rear fenders.

HUDSON HAS NEW SERIES

Coupled with minor styling changes in its established Hornet, Commodore and Pacemaker series, Hudson is currently introducing the new *Wasp* series. Later in the year, probably in early summer, the company plans to bring out a fifth line to compete in the so-called small-car field. It is expected to sell for hundreds of dollars less than current Hudson models.

The new *Wasp* has a 127 bhp six-cyl. engine. It offers two heads, an aluminum one which gives 7.2:1 compression ratio or an iron alloy with 6.7:1 compression ratio. Bore is $\frac{3}{16}$ inches; stroke is $\frac{4}{3}$ inches with a 262 cu. in. displacement.

In addition to the *Wasp* powerplant, which is also used in the Commodore Six, Hudson offers three other engines for 1952. They are the 145 bhp, six-cyl. Hornet, the 128 bhp, eight-cyl. Commodore and the 112 bhp Pacemaker.

KF SPACES INTRODUCTIONS

Announcement of 1952 KF cars is being spaced over a period of several months. First two to bow are the Kaiser "Virginian" and the Henry J "Vagabond." Distinguishing changes in these series is the mounting of the spare tire in the continental style. The Henry J is available with either four or six-cyl. engine.

Just about the time MOTOR TREND reaches newsstands this month, another Henry J model will be unveiled—the "Corsair."

FORD COMPLETELY CHANGED

Probably the most radically changed of all 1952 cars, Ford is offering three completely new lines for this year. The array involves a more powerful V8, an

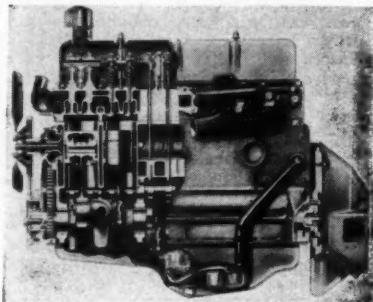
entirely new, ohv six-cyl. engine series, and an "economy" series called the "Mainline."

The new "six" is rated at 101 bhp and 176 lbs.-ft. torque. It has a 7:1 compression ratio, a 215.3 cu. in. displacement 3.56-inch bore and 3.6-inch stroke.

Ford's V8 has been modified to deliver 110 bhp and 196 lbs.-ft. torque. Changes were made in the camshaft, carburetor, and in a higher compression ratio—7.2:1.

Both engines feature cast alloy crankshafts, camshafts, exhaust valves, and aluminum pistons. The "six" has integral valve guides cast of part of the cylinder head, a full-flow oil filter, timing chain in place of fiber gear, and all-steel cylinder head gaskets.

Styling is considerably changed from last year. The front end treatment is centered around a triple-spinner grille. All models have curved one-piece windshields and rear windows. Taillights are



Power plant of the new ohv Ford Six puts out 101 bhp, boasts short stroke, high efficiency, uses 7:1 compression ratio, has displacement of 215.3 cu. in.

mounted in a housing resembling jet tubes.

Two notable mechanical innovations are found throughout the Ford lines. Like Lincoln and Mercury, Ford is utilizing the overhead clutch and brake pedals. These units are suspended from a bracket anchored to the dash and instrument panels. The gas tank filler pipe is located in the rear behind a hinged license plate.

LINCOLN CONTINENTAL PRESENTED

Newest of the automobile industry's "dream cars of tomorrow" is the experimental Lincoln Continental. No production is planned for this car in 1952, the current version being solely a pilot model. However, Lincoln designers and engineers point out that the car could be placed into quantity manufacturing without any major styling changes.

Called the 195X, the new car has a 123-inch wheelbase and an overall length of 220 inches. Height is 56.7 inches and width 81.25 inches. Specifications include power brakes, power steering, and a torque converter transmission. The roof panel is a solid leather-covered canopy with transparent retractable non-glare, non-heat-conducting glass over driver and front seat passenger.

DE SOTO'S NEW ENGINE

The power plant of the 1952 De Soto is essentially a scaled-down Chrysler Fire-Power engine, is tagged "Fire Dome." Its output in horsepower per cu. in. is even higher than that of the Chrysler V8, the ratings being .5795 and .543, respectively. Bhp is 160 at the high figure of 4400 rpm but, due to the engine's short stroke, piston travel is a very healthy 2521 ft. per min. at peak output. Displacement is a mere 276.1 cu. in. A new body for De Soto is in the works, is scheduled to be released this summer or in '53.

PLANS FOR 1953 UNDERWAY

Nevertheless, industry observers expect 1953 cars in general to look considerably more re-styled than current models do in comparison with last year's lines.

Predictions are that 1953 will be the year the industry has to bring out styles with definite sales appeal if buying is to be kept at high levels.

Chevrolet, for example, has a completely new car on a stand-by basis. This job will be thrown on the market just as soon as the company experiences major buyer resistance to its present product. It was not brought out this year because Chev figures to sell everything it can build under government restrictions.

For some time now GM has had entirely new bodies for both the Oldsmobile 98 and Cadillac, but has held them back due to "Government limitations." Another company with a new body style all set to go is De Soto.

Speaking of V8s, Buick's long-awaited new engine has had so many changes worked into it, that the company may not be able to get it into quantity production even in 1953. Original plans called for its introduction this year. Now the big bottleneck is manufacturing equipment.

SAE NOTES

Two announcements of unusual interest were made in Detroit recently in connection with the annual convention of the Society of Automotive Engineers.

A new car radiator using 75 per cent less copper is soon to be offered by Monroe Auto Equipment Company. It is of tubular type construction rather than the conventional cellular type. The manufacturer claims it lasts 25 per cent longer.

Power steering will be one of the big mechanical selling features of the industry this year. Estimates made at the SAE meeting are that 200,000 vehicles will be equipped with the device.

Lincoln has been experimenting with a power steering unit for several years, and it is still undecided whether they will bring it out during 1952 or wait until next year. It all depends upon how the public goes for the units now being offered.

—Harry Cushing

April 1952

ATTENTION ALL DEALERS!



Become the Newhouse "Hop Up" Headquarters in Your Area

Ernest Newhouse invites you to become an Associate Dealer. Join the hundreds of dealers who already benefit from Newhouse Automotive's volume purchases... direct from the nation's leading manufacturers of high performance equipment.

Newhouse Automotive combs the market for the finest power, speed and economy items, tests and approves them—then passes them on to you at lowest possible cost.

Write on Your Business Letterhead for Your FREE Dealer Catalog and Full Newhouse Associate Dealer Information.

NEW FUEL REGULATOR SAVES GAS!

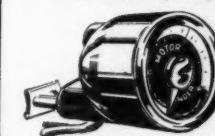
STOPS: ✓ Carburetor Flooding ✓ Power Loss
Many users claim this amazing regulator boosts mileage up to 25%. It eliminates fuel pump pulsation, gives s-m-o-o-t-h fuel flow, prevents vapor lock and percolating. Pays for itself with gas saved and by reducing engine and carburetor wear. Fits all cars and trucks. Postpaid.....
(Or send \$1—balance C.O.D.)



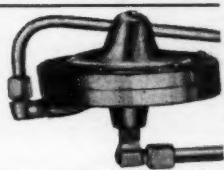
THE "MOTOR MINDER" FOR ECONOMY-DRIVING

Standard Model, \$10.95

New Deluxe (Ebony Case), \$13.95



New Stewart-Warner instrument tells at a glance how to save gasoline, how to drive efficiently, and how to locate and remedy engine troubles. Fits all cars and trucks. Includes complete kit for easy, quick installation. Special bracket mounts instrument above or below dash. A practical and beautiful accessory for any car.



NEWHOUSE STOCKS COMPLETE HOT ROD EQUIPMENT FOR ALL MAKES OF CARS. THOUSANDS OF ITEMS ARE READY FOR "SAME DAY" SHIPMENT. ALL EQUIPMENT IS FULLY GUARANTEED AND PRICES ARE STRICTLY COMPETITIVE.



World's Largest Distributors of Speed and Mileage Equipment

1952 SPEED EQUIPMENT CATALOG
Complete new catalog picturing and describing hundreds of speed equipment items for all makes of cars. 25c postpaid.

DEALER INQUIRIES INVITED

Dept. MT-4, 5805 East Beverly Blvd., Los Angeles 22, Calif.



\$21.75 Plus 75¢ Postage

Dress up your engine with this highly-polished aluminum Hi-Flow Filter! Engine safety with engine beauty!
Send check or money order now.

Inner Line
HIGH CAPACITY OIL FILTER
FOR CHEVY HOP-UPS



FILTORS Inc., Port Washington, N.Y.

Please rush Inner Line Filter for Chevrolet, Year _____. I enclose Check Money Order for \$21.50, plus 75¢ postage. Or, send descriptive material

NAME _____

ADDRESS _____

CITY _____ STATE _____

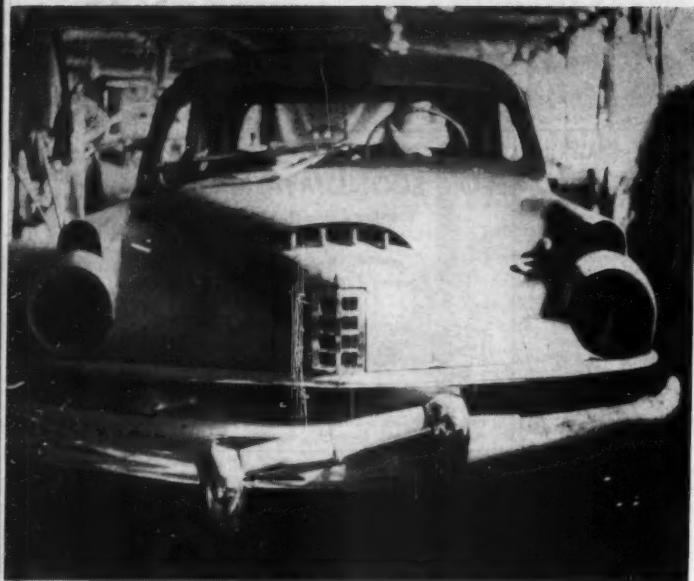
2.5 LITRE FERRARI ROAD TEST in the April issue of AUTO Speed & Sport

This—plus an extensive story on How to Drive a Sports Car, the new Mercedes "300" formula for fun and many other articles tailored for the sports and foreign enthusiast.

ON SALE MARCH 21ST!



Thirty-five

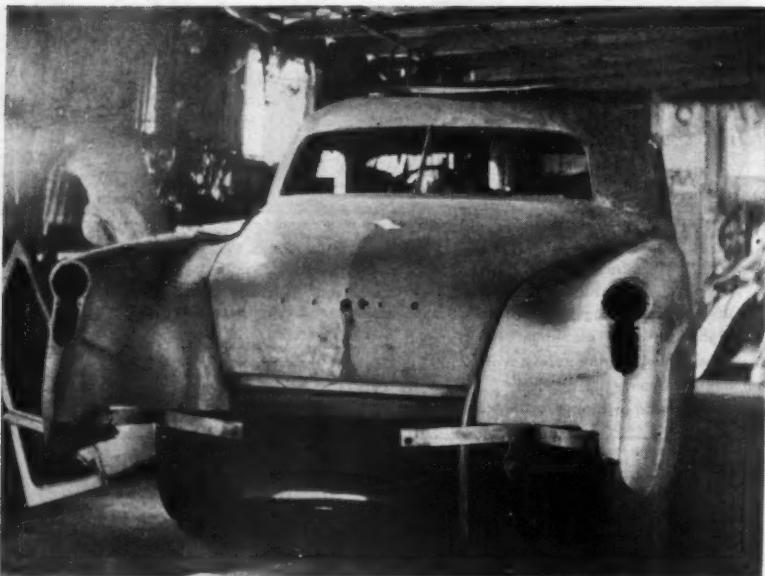


Custom job in Williams Custom Shop features combination Cadillac bumper, Merc centerpiece and Pontiac grille bar



Use of caddy tail fins is standard customizing stunt; but tail pipes through bumper guards are novel innovation

CUSTOM CURRENTS



Wide-set rear fenders and turtledeck made from a hood gives Williams' personal car the illusion of speed. Fender lines denote Tucker styling influence

Photos by Bill Harkins

CUSTOM BODY WORK, at least as far as restyling of stock cars is concerned, may have originated in California, but the Golden State no longer holds a corner on this market. As proof of this you need look no farther than some of the photos accompanying this column, showing a custom shop in Orlando, Florida.

As the months go on, one of the purposes of this column will be to show you that, although the bulk of custom work is still done in California, and particularly in Los Angeles—the Detroit of customizers—other states throughout the country have their share of custom body shops. For much of this information we'll depend on you, our readers; if you know of a garage, or individual, doing restyling work, put us in touch with them.

Other items of interest we'll discuss will be new custom cars under construction, the latest customizing ideas, and hints on how to give your car that "individual look." We'll welcome ideas from all of our readers.

Williams Custom Shop

The Florida shop mentioned previously has been operated for the past year by genial owner Don Williams. He says that during the past six months he has had so much business that he's forced to look for a larger place and also for more help. Most of Don's jobs are full-scale custom jobs, being built from the frame up. He states that people generally don't have a clear-cut idea of what they want, except to make it "... different, low and fast!" Don then combines his many years of body-building experience, his natural in-



If Don Williams ever has time to finish his personal, several-year-old custom, he'll still be ahead in design. Outside work forced postponement of the job

genuity and hot rod and sports car ideas, coming up with the types of cars shown here.

Tennessee Ford

Not entirely a new idea are blanked-in rear quarter windows, such as on the Law-

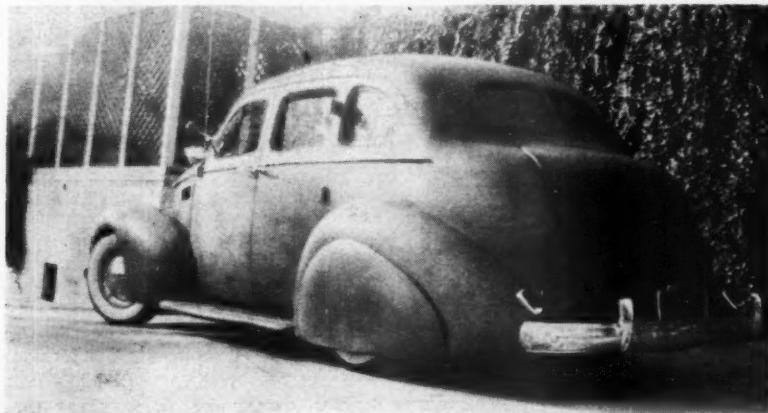


son Christenbury '40 Ford, but it definitely is one that is not seen too often. Other things Christenbury of Memphis has done to his car are: partial dechroming, concealed gas tank filler neck, bull nose, leaded turtledeck, addition of dual Smitty

mufflers and '49 Plymouth bumpers. This is a good example of what you can do—the owner did all this, except for the painting.

San Diego Studebaker

Unusual, to say the least, is the '40 Studebaker owned by Ted Cooper of San Diego, California. Still sporting its primer coat (preparatory to final painting), this job has a 6½-inch stepped frame, has been lowered three inches in front, and boasts a hood with no less than 92 louvers! Other features: bull nose, leaded deck, full skirts, black-and-white custom upholstery, a ¾-race Stude engine, and exhaust pipes protruding from under the left running-board. This latter feature is one way of keeping from scraping the tailpipes in low driveways, but what about the exhaust smoke while idling in traffic? Seems to us that the driver would get most of it.



Sharp Studebaker from San Diego. Vital statistics of this custom in copy

April 1952

HOWDY FOLKS!

When yuh hit our Range be sure an' see us. The latch straing is always out an' we'd be plum' mad tuh miss yuh! An' if yuh wanna buy a foreign car or have a sick one that needs doctorin' come in anyway—we got the best rubber-tired hoss doctor this side of the Alps. Or if that ain't enough, the ROCKY MOUNTAIN SPORTS CAR CLUB will show yuh the darndest time yuh ever had! Ever chase kitues in an MG or neck-rein a hi-compression maverick up the Lands End Hill Climb where even a Cooper has tuh have three universal joints in its frame to git aroun' the corners? Maybe theres nuttin' new under the sun but cum out an' try it! When yuh git here throw yore hat in the door—if nuttin' happens in thirty seconds cum on in.

Ted and Vern

WORLD MOTORS

Grand Junction, Colorado

JAGUAR — WOOLSEY — RILEY — MORRIS
MG — CROSLEY — HARLEY-DAVIDSON
CUSHMAN — SPEED EQUIPMENT



Chrome·gard

**PROTECTS
THE SPARKLE**

BEFORE



AFTER



SEND TODAY!

Here's the answer for protecting chrome finishes on all cars especially "flash" chrome on new cars. Stops rust, corrosion, and pitting. Easy to apply—dries crystal clear—adheres indefinitely.

Chrome-Gard Kit—enough for all trim of average car. Send \$1.00 for your Kit today.

LIQUID GLAZE INCORPORATED
Box 627 • Lansing, Michigan

Makers of the famous Liquid Glaze Treatment for All Car Finishes

INTERNATIONAL NEWSLETTER

Text and Photos by
JACK CAMPBELL

THE ENTRY of the new 12-cylinder Ferraris at Indianapolis has stirred up much talk in the back rooms. After the showing that this car's little brothers made at the rugged "go" in Mexico it is not unusual that the racing fraternity is giving this entry more serious thought than they have given the foreign entries of recent years. Those have usually been former Grand Prix cars that have had their wheels run off for several seasons in Europe, then brought to America by enthusiasts who didn't quite understand foreign ways.

This year, however, the tale may be a bit different. The car has been prepared especially for this race, and Gerry Grant, the car's owner, has put a competent man in the driver's seat—Johnny Parsons. It is also interesting to know that Johnny will go to Europe in March to pilot the Ferrari in the road circuits that make up the Grand Prix season. He will drive under the flag of Ferrari as a member of the factory team, and it is said that the factory would like to make Johnny world champion next year. Everyone has felt for a long time that an American driver, given a proper machine, could do a good job in the Grand Prix races. Now we will know.

As this column goes to press we hear that Ferrari will enter another car at Indianapolis under the able guidance of Alberto Ascari. Ascari has been a factory driver for Ferrari for a number of years and is very accomplished in the type of racing prevalent in Europe. It will be interesting to see how he will make out on a type of course so foreign to his experience.

Leaving the Indianapolis kick for a bit, let's take a look at some of the goings-on in the various sports car shops in Southern California. The activity in this department is fast approaching the cloak and dagger

stage, with the competition getting quite fierce in all classes. Consequently there are many interesting machines being built up in relative secrecy.

Among the more unusual cars under construction is a potent little Crosley-Fiat in Coronado, the work of Bob Hammel, long time sports car enthusiast and master machinist. He is also a part-time wizard, as this little jewel will bear out. The machine is pretty close to Topolino dimensions in wheelbase and tread, but there the similarity ends. The chassis has been fabricated out of thin-wall tubing and uses the Fiat running gear. The engine is a mighty Italmeccanica-blown Crosley that has endeared brother Hammel to his neighbors by transforming their television screens into fine examples of non-objective painting. Along with the electrical disturbance there is also quite a bit of noise, and when you realize that most of the work on the car is done in the evening and early morning hours, the awkwardness of the situation is easily seen. People in general are quite narrow about such things. Hammel expects the finished car to weigh about 650 lbs. This minimum weight is being accomplished by using a Fiberglas body and eliminating all non-essentials. The blower is driven directly off the crank and runs at crank speed. The boost indicated is 50 inches of mercury, or close to three times atmosphere.

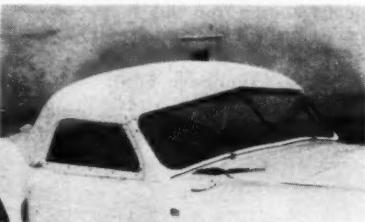
Over in the shop of Emil Dietd all effort is being expended to complete a new custom competition body for Roger Barlow's Simca. This car is much the same as Roger's present road racing machine but will weigh, he hopes, about 100 lbs. less. When it is completed, work will start on another project—a tubular chassis using Simca components. This will be the light-

INDIANAPOLIS 500-MILER

- PARSONS TO DRIVE IN EUROPE
- SPORTS CAR SHOPS

est yet and will keep the Barlow entries strong in the 1500 cc class.

As activity in the sports car field increases, so does the interest of some of the local specialty manufacturers. A case in point is Mr. Frank Kurtis, long known as a maker of fine race cars. Mr. Kurtis has been giving much thought to the problem of producing an inexpensive and road-worthy sportscar chassis for popular consumption. He has come up with a plan to make chassis in three classes, or rather a chassis that is expandable into any of three classes. Beyond the fact that these chassis will be of a tubular nature and will have a torsion-bar type of suspension, not much more information is available. However, in light of Mr. Kurtis' past record,



A common fault of sports cars in general is poor provisions against adverse weather. Shown here is the Carson solution to the Cunningham's problem

it would be a safe guess that there will also be a backroom full of body panels and the like.

Now to the shop of Jack Burkhardt, where, along with the never-ending fight to make his Citroën Special stay together, there is a new campaign being waged to take weight off the fabulous 2 Jr.—that V-8 60-powered MG that has been such a consistent threat in the past. Also joining the Burkhardt team is a newly acquired and somewhat modified MG TC. In future events we will see this shop competing in three separate classes. This is the kind of enthusiasm that makes automobile sports grow.

A new name among the body builders is that of Marvin Faw. Mr. Faw has gained note recently as the builder of the interesting body that Don Parkinson ran on his XK 120 Special when he won the recent Palm Springs race.

Work at the moment in this shop is directed toward completing a fine looking



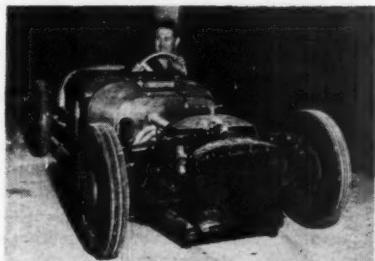
Builder, owner and driver check the height of Cummins' diesel. Left to right: Kurtis, Cummins and Agabashian



Emil Diedt, master body builder, working on headlight details of new Simca Sports car belonging to Roger Barlow

sports car chassis made by Eugene Scott of Balboa. This avid enthusiast having no shop to work in, took over the family living room. It must be noted at this point that the foregoing solution is not to be tried by those married men whose wives tend to be a bit unstable. Mr. Scott, however, got away with it. All of the parts were cut by hand to fit, and then taken to a local wheel-aligning shop where they were put on the aligning rig and tack welded. The chassis was taken off the rig and the final welding was done. Scott has come up with a mighty interesting-looking little machine. The suspension is four-wheel independent, the rear axle being a modified De Dion fabricated from Ford parts. For a power plant, Scott plans to use a hot V-8 60.

As a clincher to this wool-gathering, it is only fitting that I get you back to where we started and this I will do with a short blast about the new Cummins Diesel Special. This car was given a press preview here on the Coast at the shop of Frank Kurtis, the man behind the chassis and body design. The first thing you notice about the car is its extraordinary lowness. The height from ground to cowl top (excluding windscreen) is 29 inches. The engine is laid on its side and the drive shaft runs down the left side of the car. Freddie Agabashian, who will tool this iron, will sit on the right side of the machine. Apart from achieving maximum lowness, this engine mounting changes the weight distribution to take the load off the right front wheel, which last year showed signs of wear.



Bob Hammell aboard the Fiat-Crosley

first time in the Pacific Northwest...

National record-holding HOT RODS!

World's finest CUSTOM CARS!

SPORTS CARS!

ANTIQUE CARS AND CYCLES!

World-famous RACING CARS!

EUROPEAN MAKES!

Record-holding MOTORCYCLES!

NEW '52 MODELS

SPEED BOATS! Gold Cup class, etc.

TIMING CARS!

"More than 100 motorized masterpieces valued at over \$2,000,000."

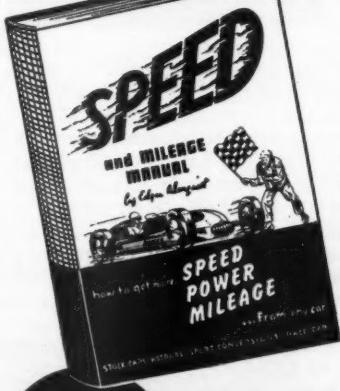
AUTOMOBILE DEALERS ASSOCIATION OF PORTLAND, OREGON

MOTOR SHOW

Pacific International Exposition Building March 15 - 23, 1952

EXHIBITORS: Write or phone... KEN NERISON, EXHIBITS DIRECTOR, 308 Woodlark Building, Portland, Oregon. BEacon 4676 - BEacon 5914

BRAND NEW!



ONLY
\$1.98

YOU GET THESE BOOKS
FREE!



ENDORSED BY CHAMPIONS!
THIS LETTER ON FILE . . .
"Won Stock Car Championship using your SPEED & MILEAGE methods." B. H. (Pittston)

"SATISFACTION GUARANTEED"

ALMQUIST ENGINEERING
Milford, 42-T, Penna.

Get This Famous POWER MANUAL

BUILD YOUR OWN }
SPEED EQUIPMENT
FAST STOCK CARS
CALIFORNIA HOT RODS
CUSTOM SPORT CARS
RACING CONVERSIONS

New SPEED AND MILEAGE Manual . . .

COVERS ALL MAKES—Shows how to double the power and mileage of your car! Reveals Racing Tricks! "Soupin!" Speed Tuning! Customizing 100 Gas Saving Secrets! SAVE MONEY—Build your own superchargers, Dual Manifolds, High Compression Heads, Racing Cams, Dual Mufflers, Water Injectors, Economizers! Covers Racers, Sports Cars, Stock Cars, California Roadster Construction, Engine Rebuilding, Frames, Bodies, Fuel Formulas, Ratios, Offy, "Speed Shop Methods!" Photo Section on HOLLYWOOD CUSTOM RESTYLING! OVER 200 ACTUAL PHOTOGRAPHS AND DIAGRAMS!

FREE BOOKS include Big Speed Equipment Catalog and California Hot Rod Manual.

ALMQUIST AUTOMOTIVE ENGINEERING
"One of the world's largest Speed Equipment Suppliers"
MILFORD, 42-T, PENNA.

Send me the NEW Almquist SPEED & MILEAGE MANUAL and my TWO FREE BOOKS for only \$1.98
Enclosed find \$..... ship C.O.D.

NAME.....

ADDRESS.....

CAR LOST ITS PEP? BURNING OIL?

Holt's

PISTON SEAL

restores pep and cuts down oil consumption when caused by worn rings.

Yes, it's true! You can treat your own car for about the price of a tankful of gas. A mere fraction of what an overhaul job would cost!

Holt's PISTON SEAL forms a self-expanding, pliable lubricating seal around the pistons.

One treatment lasts for 10,000 miles.

Easy to install. Cannot harm the finest engine. Thousands of satisfied users. Called "penicillin for engines," and "the poor man's friend."

WRITE TODAY FOR FREE DETAILS!

R. H. Philbrick, Dept. 33D
220 Miracle Mile, Coral Gables 34, Fla.
Rush free details on PISTON SEAL.

Name _____

Address _____

City _____ State _____

Canadians: Write — Treglown, Inc.
1269 Greene Ave., Montreal, Canada



It's easy! Remove plugs... insert rubber tube and squeeze

NOTE:
This is the
genuine
HOLT'S
Piston Seal.
Proven quality
for 15 years.

LEOPARD and ZEBRA[®] SEAT COVERS 41 TO 51 CARS

LEOPARD SKIN

Give your car that interesting, leopardskin-like fury look. So amazingly different . . . yet reflecting true tone and quality. Masterful artistry in design and custom tailoring.



ZEBRA HIDE

Make your car as different as all out-doors. They're sleek, rich-looking, smartly styled and alive with fashion . . . women rave about them. Custom tailored and designed by master craftsmen.



SEND FULL PAY. SAME C.O.D. AND POSTAGE

MAKE	YEAR
MODEL	
FULL BODY INFORMATION	
LEOPARD <input type="checkbox"/>	ZEBRA <input type="checkbox"/>

KLEINMAN'S
DISTRIBUTING CO. EST. 1916
DEPT. F-24, 4254 WOODWARD
DETROIT 2, MICHIGAN

WELD BRAZE, SOLDER, and CUT →

ONLY
\$1475
F.O.B.
completed



No experience needed. Follow simple instructions, weld on iron, steel, bronze, brass, aluminum, and other metals. Plugs into any properly grounded A.C. or D.C. line. Make or save time and money doing repair work for yourself and others. Repair men, farmers, tinsmiths, home and auto owners, hobbyists, etc., may FOUR-WAY pay for itself over and over. Order today or send for Free details.

FOUR-WAY WELDER COMPANY, Dept. F27-DC
2326 So. Michigan Ave. • Chicago 18, Illinois

ORDER
NOW
10 DAY
TRIAL

Dealer's Doldrums

(Continued from page fifteen)

Sometimes you are rewarded for such little considerations. When one of these same friends is through with his car, he will allow you to sell it for him. This is the real deal. When he wheels that "klunker" onto the lot, he's just another guy out to unload a car at about twice the retail price. You can count on a speedy lesson in "how to sell." He describes beauties and sturdy, honest qualities of his car that are truly heart-warming. This "klunker," it seems, has never burned a drop of oil in its life, starts and runs like a top in any weather, and gets a regular 25 miles to the gallon. It's easily worth twice the price because it had a complete motor job about six months ago.

But when you hear all this, or when you're told that the seat covers hide upholstery "just like new," don't look. Believe the man. It was new once. Why argue? Just start figuring, and if you are lucky enough to have the ready cash, then buy this "pure iron," tow it to the lot, put it in running shape and figure on a fifty going the wrong way. After all, he is a friend—or the friend of a friend.

If you weather all these storms and stay a dealer, as partial compensation you can learn the language of the trade. The words "heap," "klunker," "bomber," or simply "pure iron" identify the curse of the used car business. The "meat and potatoes" car, with original paint, in fair condition, and with about 10,000 miles on the speedometer for every year of age is called a "unit" or a "piece." The words "cream puff" are reserved as a term of endearment for something special—a car like new, inside and out, with low mileage.

To make money, you have to find time to get people on the lot when you, too, are there, and then sell them cars at something of a profit. You don't have the advertising backing of your big brother, the franchise agency, so you are strictly on your own. You start by placing a few great gaudy flags and banners about the lot proclaiming, "CASH FOR YOUR CAR," to stimulate customer interest. Then phone calls, postcards, personal letters, newspaper ads and radio spots lure the so-called victim to the lot where you can work on him.

If the ads really pay off, the customers are there at sunrise. You are there two hours earlier. On a normal morning, you start by not getting enough sleep. At 2 a.m. somebody who might have bought a car called from somewhere near Gastritis Diner on Route 3. It seems that he is out of gas and wonders if you couldn't just bring out a few gallons. The chances are he is the head of the Chamber of Commerce, and you do it.

At the lot, you are a doctor facing about 30 patients, each sneering, "Go ahead, diagnose me. I defy you to tell what

ails me." Each has its own little ailment. This one has difficulty starting, that one, after starting, has difficulty running, the third emits eerie thumping noises from deep within its greasy innards, while another is just tired out and the speedometer mileage proves it. A savage mechanical disposition will defy the best, factory trained mechanic.

The first job is to see that all the cars are there and that none of their various essentials—wheels, tops, motors—have disappeared in the night. Then it is good policy to start them all for a warm-up. In summer, this is accomplished with about 80% success. In winter it is a nightmare, and the dealer watches the thermometer during freezing weather with the intense concern of a tycoon at the ticker tape. A cracked block kills all chance for profit on at least one unit. Only when the cars are warmed up and the tires and antifreeze checked, can you lurk in the office waiting for advertising to pay.

Dealers watch the approach of any customer with a certain twinge of apprehension. Along with being something of a psychologist and mechanic, the dealer must be a good hand with a crystal ball. Does this fellow edging onto the lot really want to buy or trade, or just unload some "pure iron" under the guise of trading?

One type always parks his car around the corner and appears on foot. He has heard that dealers will try to "steal his trade" by boosting the price of the car he wants to buy. This "sharpener" takes a devious route, looking at several cars before sort of tripping over the car he wants and noticing it by accident. Only after the dealer names a price will he drop the psychological bombshell and announce that he has a car for trade. Since the dealer is not accustomed to buying any sort of pig in a bag, he counters with a demand to see the car before making an offer. Not much is accomplished either way with this sort of trading.

The "I'll-be-back-later" type is another sound reason for peptic ulcers. This chap shambles about the lot, kicks all the tires, feels all the paint jobs, and makes a choice. He won't place a deposit on the spot, but mutters, "I'll be back later tonight or tomorrow with the money." Ninety percent of the time he vanishes from the earth and is never heard from again.

The "fellow-with-a-friend" is the greatest hazard to dealer sanity. This type can never make up his own feeble mind, but must have his friend's OK before buying. If he would come back with a first-class mechanic, that would be all right, but generally his "friend" is just another backyard mechanic with some unique method of checking cars. Perhaps he will brush the dealer aside, hurl himself into the car and rev up the motor to the point of disintegration. Or he will set the hand brake, yank the car into low, and then snap out the clutch. The theory is that if the car

stalls, the clutch is good. You claw madly at this joker through billowing clouds of burned clutch facing. After about three or four of these dramatic little tests, one of those friends can shout, "Aha! Bad clutch!" And he will be right. The dealer is stuck for new facings.

Then there is the "Weeping Willie." He is a great little customer. Yes sir! He is a sad-faced character who wanders about the lot for two hours taking the dealer with him. After all this wasted time, he stares at his watch mournfully and announces, "I am only looking—plan to buy in a year or two. Think prices will level off by then?"

As extra service, the inexperienced dealer is always ready to act as family guide and counselor. When a couple comes onto the lot and the wife—a long swoopy model—is looking dreamily at a long swoopy convertible while earnest hubby discusses gear ratios and the bore and stroke of a very sound six-cylinder family car; then the rookie dealer is apt to offer sage advice. But after a few years in the business, you have learned. When those domestic situations turn up, just step aside brother—step aside.

The thing that gives ulcers is the lack of emotional release. You never can hit any of these jokers with some sort of blunt instrument—a tire iron, old piston, or light Crosley, for instance. The law frowns on such practice and is always somewhat stern with dealers.

While we are on the subject of law, if your educational background shows some time (say about four years) devoted to law courses, then go ahead and write up your own sales contracts and financial agreements. Otherwise, have competent lawyers draw up these forms and make all future contracts from the originals.

And if you deal with minors without written consent of parents or guardians, if you purchase cars with even slightly dubious titles, or if you enter into consignment deals without an agreement of sales price in writing, then look again brother—that man perspiring in court may be you. And in the jaundiced eye of the law, you are wrong.

The car dealer should always look unruffled from his starched shirt cuffs to a light grey or buff hat that can never show the signs of abuse by a falling trunk cover. Neatness indicates that he never doctors his cars. He should have ready cash though his sales have been few and far between, and be a soft touch for "a sawbuck 'til Friday." All dealers, of course, are always loaded. He must drive nothing but the newest and best looking car on the lot and park it frequently in front of the better clubs and hotels. He must always be "on stage."

For laughs, heartbreak, and a leap-frog game of profit and loss, the automobile business stands unique. It is the show business of the financial world.—C. D. Harrington

**Springtime is the time to
"CUSTOMIZE" YOUR CAR!**

Another. Eastern "First"

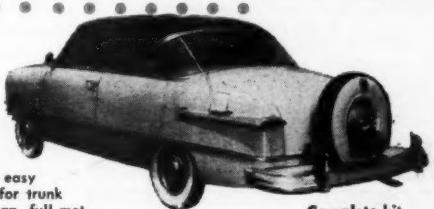
1950-51 FORD GRILLE BAR

Eastern scores again with the newest in Custom Grille Conversions. Really gives that expensive "Big Car" look. A beauty . . . heavily chromed 18 gauge steel . . . extends inwards a full 7 1/2". Replaces complete center bar on the '51 without further alteration. 1951 top molding and hood conversion required on 1950 Ford. Eastern's NEW Grille Bar has already taken California by storm . . . why not be first in your town? Mail order shipment \$20.95—when purchased at store only **\$19.95**

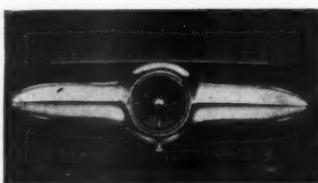


CONTINENTAL TIRE KIT

Your 1949-51 Ford can now have that LOW, LONG, SLEEK "Continental" look for far less than you imagined. Not only improves appearance but INCREASES luggage space. Specify which tire type (1) lifts up with trunk lid and out of way for easy access to trunk or (2) folds backwards for trunk to clear. Trunk is complete with gravel pan, full metal tire cover, chrome welt, license light, everything you need including easy-to-follow installation diagrams. Why not "go" Continental today?



Complete kit
only \$59.50



1949-50 FORD CLOCK PANEL

Beautify your dash with this flashy chrome unit. Velvet finish chrome plating on die cast metal. Drill only two holes for simple installation. **\$3.95**



ELECTRIC

This is it . . . practical electric conversions that make possible PUSH-BUTTON OPERATIONS for doors & trunk. Easy to install and operate . . . reliable and theft-proof. Throw away the handles, fill in the holes. Place push-button control where you want. Trunk kit fits Ford & Mercury, 1937-52, all GM. 1949-52 (except '49 Olds 98). Door kit fits all cars, all makes. Specify make and year of car when ordering. Here's a unit originally designed for custom cars but now you can "customize" your own car with kits from Eastern.

TRUNK KIT \$9.95 DOOR KIT \$19.95



MERCURY GRILLE CENTER 1949-50

Easiest and most economical way to get that "new car." Just give your 1949-50 Mercury that new grille styling. Now you can have a solid, massive-looking front without welding or cutting. Just drill two holes for very simple installation. This Grille Center streamlines appearance, replaces center bar . . . it's die stamped and chrome plated . . . yours for only **\$6.95**

25% deposit on all orders. Prices F.O.B. Los Angeles. Add 3% Sales Tax in Calif.

Eastern Auto
"CUSTOM ACCESSORIES"

3319 MT-4 So. Grand Avenue
Los Angeles 7, California

CHROME DASH PANELS



1941 Ford (2-pc.) dash panel.....	\$ 9.95
1942-48 Ford or Mercury dash panel.....	\$15.95
1941 Ford radio panel.....	\$ 3.45
(specify if Philco or Zenith)	
1940 Ford instrument panel.....	\$ 5.95
1940 Ford clock panel.....	\$ 3.25
1940 Ford radio panel.....	\$ 3.25
1941 Mercury dash panel.....	\$15.95

LOWERING SHACKLES

For Ford-Mercury—set of 4	1932
4" \$1.25	1940
5" \$1.50	1948
6" \$1.75	

LOWERING BLOCKS

\$3.95
set

consists of 4 U bolts and 2 blocks
(1½" block for 2" drop)
(add \$1 to above for 2" block—gives 3" drop)

SPECIFY YEAR AND MAKE OF CAR

Immed. Delivery. Enclose 25¢ with order

MONEY BACK GUARANTEE

Send 25¢ in stamps or coin for Super Catalog

LEO'S AUTO SUPPLY

Arizona's Largest Hot Rod Shop

Dept. M-A, 2823 N. Stone Ave., Tucson, Ariz.



JAGUAR M.G. PORSCHE
SALES, PARTS AND SPECIALIZED SERVICE

IMPORTED MOTOR CAR CO.
216 E. PENN ST. • HOUSTON, ILL.



BUILD and DRIVE your own HIGH SPEED RACING BOAT as hundreds of others are doing! Easy to follow our simplified plans for newest types of racing craft. Large selection of full race Hydroplanes ranging from 6 ft. to 20 ft. lengths. Service, Racing, Utilities, and 3 Points. Both Inboard and outboards.

Send 25¢ for Catalogue containing pictures and descriptions of Champion Boats for which plans are designed and distributed exclusively by CHAMPION BOATS, 1524 W. 13th St., Long Beach 13, Calif. Dept. 13-P

Protect Your Car Finish
In Any Weather! Vinyl Plastic
PORTABLE GARAGE
\$15

Heavy gauge plastic protects against rain, snow, dirt, tree-drippings, etc. Will not mildew, rot, or peel. Elastic bottom holds most ordinary car. Standard weight—Feather weight, 5½ lbs. Specify car make and model. Order COD, enclosing \$1 deposit, balance and COD postage on delivery or save the postage, enclosing \$15 with order PREPAID. Specify color wanted—clear, rose, green or blue. 10-day money back guarantee.

ORDER TODAY!
Specify make & model car
... Color garage wanted.

OLLIE AUTO TOP

6201 Famous St., Dept. MT-254
St. Louis 10, Mo.

Plymouth Road Test

(Continued from page twenty-one)

PERFORMANCE COMPARISON

TEST	1950 with 3.9	1952 with 3.73
Standing start 1/4 mile	:21.27 secs.	:22.93 secs.
0-30 mph through gears	:05.93 secs.	:06.41 secs.
0-60 mph through gears	:18.56 secs.	:22.54 secs.
10-60 mph in high	:24.40 secs.	:27.38 secs.
30-60 mph in high	:14.84 secs.	:18.28 secs.
Average top speed	80.38 mph	85.56 mph

Unfortunately, fuel consumption checks were not made on the 1950 test Plymouth but, other things being equal, the 3.73-equipped car will yield proportionately better gas mileage figures.

The Power Plant

The six-in-line Plymouth engine has undergone no major changes since 1942. It is not an engine calculated to inspire the connoisseur of high-performance engineering, yet it does a highly competitive job of propelling its reasonably dimensioned load. Refinements are there: There are four rings per piston, two oil rings and the top compression ring is poros-chromed. Exhaust valve seats are inserts of high-durability metal.

There is full pressure lubrication to the main, rod, and camshaft bearings and a by-pass fuel filter system is utilized in the deluxe models.

Oddly enough, there is no vibration damper provided for this well-balanced six-cyl. engine. The "Follow-Thru" starter makes for instant starts in cold weather. In accordance with the manufacturer's specifications, our test car was run on "regular" grade gasoline, and detonation appeared only under the severest loads. This power plant is highly developed, highly reliable and of conservative design.

Cost Per Mile

This month we introduce a new factor in our tests: operating cost per mile, as figured over a one-year period and assuming 10,000 miles of driving. Cost of gasoline takes into consideration the type of fuel recommended for the car by its maker and assumes a price of 25 cents for regular grade and 27 cents for premium grade. Insurance is based upon the most popular policy in a large metropolitan area. Depreciation is based on Blue Book figures of depreciation for the period 1950-'51, the latest year for which such figures are available. Maintenance covers tires, running gear, engine work, body work, chrome work, and automatic transmission, if any. This uniform yardstick will be applied to each car we test and will replace the Trend Trials Number.

GENERAL SPECIFICATIONS

ENGINE

Type	L-head, in-line six
Bore and Stroke	3½ ins. by 4½ ins.
Stroke/Bore Ratio	1.3475:1
Cu. in. Displacement	217.8
Maximum bhp	97@3600 rpm
Bhp per cu. in.	.445
Maximum Torque	175 lbs.-ft. @2000 rpm
Compression Ratio	7.0:1

DRIVE SYSTEM

Conventional synchro-mesh, three-speed transmission Ratios:	First—2.57 Second—1.83
	Third—1.00 Reverse—3.48
Rear Axle: Semi-floating, Hotchkiss drive, hypoid gears. Ratio: Conventional—3.9, Optional—3.73.	

DIMENSIONS

Wheelbase	118½ ins. (Cranbrook & Cambridge) —Concord has 111 ins.
Overall length	193½ ins.
Overall width	73¾ ins.
Overall height	65½ ins.
Tread	Front—55½ ins. Rear—58½ ins.
Tread/wheelbase ratio	3.75
Turns, lock to lock	3.75
Weight (test car)	3340 lbs.
Weight/bhp ratio	34.4:1
Weight/road hp ratio	55.6:1
Weight distribution (front to rear)	54.5/45.5

CHASSIS DYNAMOMETER TEST

1200 rpm (full load) 23 mph	31.5 road hp
2000 rpm (full load) 37 mph	49.5 road hp
3000 rpm (full load) 33 mph	60.0 road hp

SAFETY CHECK

QUESTIONS	YES	NO
1. Blind spot at left windshield post at minimum?	X	
2. Blind spot to right rear at minimum?	X	
3. Positive lock to prevent doors from being opened from inside?	X	
4. Does adjustable front seat lock securely in position?	X	
5. Minimum of projections on dashboard face?	X	
6. Is emergency brake an emergency brake and is it accessible to driver and passenger both?	X	
7. Are cigarette lighter and ash tray both located conveniently for driver?	X	
8. Is rear vision mirror positioned so as not to cause blind spot for driver?	X	
TOTAL FOR PLYMOUTH CRANBROOK: 62.5		

TABLE OF PERFORMANCE

ACCELERATION TRIALS & TOP SPEED—See Performance Comparison Above.

FUEL CONSUMPTION (MPG)

At a steady 30 mph	23.2
At a steady 45 mph	20.9
At a steady 60 mph	17.3
Average traffic	16.9

SPEEDOMETER CHECK

At 30 mph indicated 30 mph	0.0% error
At 45 mph indicated 47 mph	4.2% error
At 60 mph indicated 64 mph	6.7% error

OPERATING COST PER MILE ANALYSIS

1. Cost of gasoline	\$134.00
2. Cost of insurance	\$117.00
3. First year's depreciation	\$211.00
4. Maintenance:	
a. Two new tires	\$46.48
b. Brake line	\$18.20
c. Major tune-up	\$10.50
d. Renew front fender	\$28.90
e. Renew rear bumper	\$29.95
f. Adjust automatic transmission and change lubricant	

YEARLY COST OF OPERATION, IN CENTS PER MILE	.059
—The MT Research Staff	

... and so to press

(Continued from page thirteen)

SOUR NOTE OF THE MONTH is the report from Ed Almquist of the theft of \$6,000 worth of speed parts from his plant in Milford, Penn. Loss through theft is always irritating; is doubly so when the crime is pointless like this one. For the equipment can't be peddled. Nobody just happens to have a few ¼ race cams or Jahns pistons he inherited from a benevolent uncle. The first time the Anti-Social One approaches his only market—a speed and power dealer—to make a deal, he will find himself in a foot race with the local badge-boys. Ed is willing to turn the other cheek in this matter—even offers a \$300 reward for information leading to the return of the merchandise, with no questions asked. If the sinner has seen the light, he can get out from under by calling Ed at Milford, Phone 6263. In the meantime, all you dealers and enthusiasts, keep your eyes peeled for any stray Almquist cams, Hollywood Mufflers, Jahns Pistons, Johnson adjustable tappets, Grant Rings and aluminum fly wheels.

—Griff Borgeson

Motor Trend

Ferrari

(Continued from page twenty-seven)

his place. And, in what must be a classic demonstration of the impatience of creative energy, the Ferrari-Lampredi duo conceived, designed, and built a new 3.3 liter (201.5 cu. in.) V-12 in time to enter it in the same *Mille Miglia*, in competition with the then still-untried 2.3! The 3.3 had too much power for its transmission, and failed to finish the race, but enlarged and refined it eventually evolved into the *America* model and into the present GP racing car. The success of the refining process was indicated by the results of the 1951 *Mille Miglia* race. The apparently jinxed Ferrari transmission failed again. But this time it was in Villoresi's *America*, and the flexibility of the car's gearing is so great that he drove the last 300 miles of the race, including several mountain passes, with fourth speed only—and won!

Let's take a closer look now at the car whose staggering reliability and performance won first and second places in the Mexican Road Race. The Type 212 (type numbers, in Ferrari nomenclature, derive from the swept volume of a single cylinder, in cubic centimeters) is a 2.5 liter (152.5 cu. in.) version of the Colombo-designed sports car. Its engine is a V-12 with one overhead camshaft per block, hemispherical combustion chambers, and an output of 140 bhp at 6500 rpm. Dry weight of the car is barely over a ton, giving it a power to weight ratio of 1:14.5. *The Autocar* of England, testing an open two-seater Type 212 which was not broken in and which they coddled, rather than pushed, recorded a top speed of 120 mph, estimated a speed of 130 mph for the same chassis with closed bodywork—an accurate guess, since the Mexican Race cars did 132 before being fully broken in. The 212's high-speed-acceleration "exceeded anything previously recorded in *The Autocar* Road Tests"—0-60 in 10.5 secs., 0-80 in 16.2 secs., 0-100 in 22.5 secs.

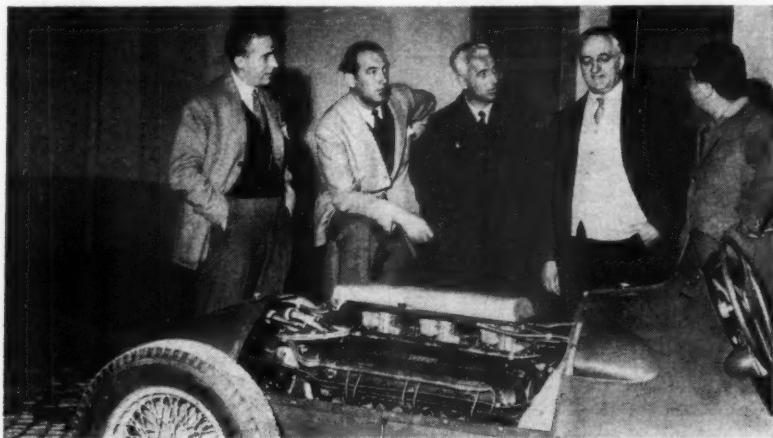
Gearing on the 212 is superbly flexible—no less so than that of the *America* of Villoresi's exploit; in fifth speed (overdrive) the car can be accelerated from walking speed to 90 mph with utter smoothness.

These are figures which indicate a pretty unusual degree of engine urge, but the power of the Type 212 is still not comparable to that of the *America*, which has the really stunning power-to-weight ratio of 1:9.2! It is easily capable of 150 mph on 80 octane fuel and its acceleration is hair-raising: it can reach 125 mph in about one-third of a mile and takes a bare 13.8 secs. for the standing quarter-mile!

Like the 212 and all the other sports Ferraris, the *America* has a V-12 engine. But if Ferrari continues the policy of adapting his grand prix techniques to his production models, the next series may be powered by four or six-cyl. engines. The newest works machine is a four-cyl., two-liter car for Formula II racing. The reduction in cylinders, and consequently in production costs, would be a boon to the sports car buyer. It takes about 2500 man-hours to produce each of the present models, and their selling prices are appropriately high: from about seven to thirteen thousand dollars each.

Economy, while it's a pleasant by-product, is not the primary reason for the drop from 12 cyls. to four. Ferrari has begun to feel that the added piston area created by the existence of many cylinders adds to performance only in the top speed range or only when the engine is supercharged; otherwise the advantages are offset by friction losses in the labyrinthine inlet passages. A fewer-cylindered engine, like the latest Ferrari Formula II machine, has better torque, quicker acceleration at medium speeds, and on a winding road course this can mean the difference between victory and defeat. Enzo will test his theory in Formula II racing, using a twelve for circuits with long straightaways, a four for the twisting type where low-speed torque is crucial.

(Continued on page forty-four)



Ferrari talent, fronted by Grand Prix machine, is, left to right, Competition Mgr. Ugolini, Engr. Lampredi, Driver Villoresi, Boss Enzo Ferrari, Driver Ascari

April 1952

SALES...
SERVICE...
Genuine PARTS

for:



- MORRIS
- AUSTIN
- DAIMLER
- RILEY
- BENTLEY
- ROLLS-ROYCE

Trades and Financing Offered

**Britain's Finest Cars
in Every Price Class!**

Write... Wire... Phone

S. H. ARNOLT, INC.

DISTRIBUTOR

415 E. ERIE ST. • CHICAGO 11, ILL.

Phone: Michigan 2-5436

DESIGN YOUR OWN LIGHT CAR

THE HANDBOOK FOR THE HOME BUILDER

56 Drawings
and Photos

Design
Alternatives
Latest
Features

59 Pages



WRITTEN BY AN ENGINEER—
APPROVED BY EXPERTS
\$2 POSTPAID—10-DAY MONEYBACK GUARANTEE
—OR WRITE FOR FREE LITERATURE
W. KORFF—BOX 1043T—BURBANK, CALIF.

Carburetor Adapters

3-4 bolt flanges adapt '49-'51
Mercury and other big carbs
to all Ford V-8s. \$3.95

2-3 bolt flanges adapt special
or stock Ford V-8 carbs to
Chevrolets, Plymouths, Ford
6s, and other 2-bolt types.
\$2.95

At dealers or order from:
GOTHA Box 141-C4 Harvey, Illinois

MANUFACTURERS • DISTRIBUTORS
AUTOMOTIVE POWER EQUIPMENT

SEND FOR OUR
ILLUSTRATED CATALOG

Offenhauser

EQUIPMENT CORP.
PHONE: 5054 M ALHAMBRA AVE
CA 2-1330 LOS ANGELES 32, CALIF.

50c

Distributors for...
SOUTHERN CALIFORNIA
MUFFLER CO. • HEAD...
• CAMS
• MANIFOLDS
Write for Lists

FISCHER'S HOBBY SERVICE
618 S. Fourth St. Louisville 20, Ky.

Forty-three

BUY WITH CONFIDENCE

MONEY BACK
GUARANTEE

TEN DAY
FREE TRIAL
(ON ALL STOCK CAMS)

MORE HORSEPOWER! SPEED!

With WEBER Precision Ground Camshafts. (ground to + or - .0005) Complete selection for all cars. These stock models available for Immediate Delivery. Ford, Chevrolet, Dodge, Plymouth, Chrysler. Prices start at ONLY \$25.00.

Weber Aluminum Flywheels made from 40 E metal stock with tensile strength of Approx. 44,000 lbs. P.S.I. Precision machined to most exact tolerance. Perfectly balanced dynamically. Ideal for Track or Hot Rod Cars. Flywheels drilled for 1932-'49 and '51 Ford and Merc. Non Aluminum cast steel flywheels available, for '32-'52 Fords - Only \$19.50*.

*8% Fed. Excise Tax. DEALERSHIPS AVAILABLE.



Learn all the facts about Cam-shafts before you buy. Check the various Grinds available.

Send 10c today for Illustrated Weber Literature and Catalog.

WEBER TOOL CO.

4200 WHITESIDE, LOS ANGELES, CALIF.
Dept. M-4 Ph. ANgleus 9-2158

SPECIAL OFFER



- No holes to drill . . . install it yourself in one hour and a half.
- Swinging tire carrier gives free access to luggage compartment.
- Absolutely rattle-free . . . squeak-free.
- Smart custom-made cloth tire cover gives real continental appearance . . . black or beige.
- Can be removed and car put back in original condition.

Complete with gravel shields, tire cover, chrome hub cap, lug lock, chrome license light . . . and all necessary bolts, nuts and miscellaneous parts. Quantity limited . . . order yours today!

MANUFACTURERS PRODUCTS CO.
6432 CASS AVENUE • DETROIT 2, MICHIGAN

... for a limited time only!

CONTINENTAL STYLE TIRE KIT for '49 and '50 FORDS

AMAZINGLY
LOW PRICED!

\$38⁵⁰
fab Detroit
COMPLETE

SHIPPING WEIGHT 65 LBS.

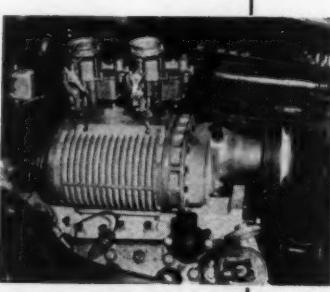
Send only 25% deposit,
balance C.O.D.

RUSH YOUR ORDER NOW!

GET THE FULL STORY ON THE NEW S.C.O.T. SUPERCHARGER

Hot Rod Magazine has just finished an exhaustive comparative test on this new blower. Details on the comparative performance of the same car with and without the use of the S.C.O.T. supercharger.

ON YOUR NEWSSTAND
MARCH 19TH



Ferrari

(Continued from page forty-three)

This most recent Ferrari theory, if it works, will probably cause the same kind of upheaval in the racing world that his success with unblown engines did. The blown vs. unblown controversy seemed to have been settled in favor of superchargers by the staggering superiority of the postwar Alfettas, but it was enthusiastically revived when the Ferraris very nearly demolished the competition in the 1951 grand prix season. Although in the years from 1929 the Scuderia Ferrari had had enormous success racing Alfa-Romeo cars, Ferrari's achievements in postwar racing with his own 1.5 liter blown cars had been unspectacular. It was the Lampredi-design 4.5 liter engine, *without* supercharger, that made the difference.

This power plant, which pushed the Formula I machines to victory at Silverstone, Monza, and Nurburgring in 1951, currently exists in two forms: single or dual ignition. The single-plug type, which won at Nurburgring, delivers about 330 bhp, the two-plug engine probably tops 380 bhp at 7500 rpm. The bore and stroke of these V-12 engines are 80 by 74.5 mm, giving a total swept volume of 4495 cc (274 cu. in.). Each valve uses four hairpin-type springs, chosen for their better cooling characteristics and because of the fact that they have less tendency to float than the coil type. In common with perhaps all classic GP engines, a detachable cylinder head is *not* used, the head gasket being an obvious weak spot in engines of extreme high compression (this engine's compression ratio is 13:1).

However, the single-stick V-12 seems to be on its way out of the Ferrari Stables. A healthy racing organization is an active experimental organization, and an amazing sequence of designs has already been developed and raced by the busily fermenting Ferrari genius. Next season will see not only the four cylinder Formula II racer and a twin ohc V-12 of the same 122 cu. in. displacement, but also a dual camshaft version of the 4.5 liter V-12 for Formula I competition. And in preparation for the new 1954 GP Formula I (750 cc blown, 2.5 liters unblown—45.7 cu. in. blown, 152.5 cu. in. unblown), a dual cam, 2.5 liter, V-6 is now being developed. This is interesting, since certain prominent American engineers who are riding the V-8 bandwagon for all it's worth have damned the V-6 as an impractical design.

Some of the questions that Americans still want answered before Ferrari supremacy is granted should be answered at Indianapolis on May 30. At least two Ferraris are expected to plead their case in America's only GP event. Meanwhile, the little Italian factory seeks ways of building cars of surpassing performance but—again in the Bugatti tradition—selling for prices that will make Ferraris available to many enthusiasts.

—Michael Brown

Pontiac Road Test

(Continued from page twenty-nine)

lifts the entire side of the car, taking both front and rear wheels off the ground.

Things we objected to in last year's car and which have not been corrected in this year's model are: the slightly high steering wheel; the left windshield post causing a blind spot in mountain driving; and glare reflection from the top of the dash and from the steering wheel cross bar.

More Horsepower

The power plant of the Pontiac 8 is an L-head with a 7.7:1 compression ratio, re-



NEW TIRE JACK—Much better, in our estimation, is this type of jack that lifts the side of the car. It's placed into its proper position by use of a locating bar that aligns jack with frame

sulting in an increase in bhp from 116 to 122 at 3600 rpm. Maximum torque has been upped seven lbs-ft. to 227 lbs-ft. at 2200 rpm. Premium fuel (such as the Mobilgas Special used throughout the test) is required with the optional head; however, the lower compression head 6.8:1, requiring only regular fuel, can be used with the "Dual Range" Hydra-Matic transmission.

Under the heavy loads the engine was subjected to in the chassis dynamometer tests, it pinged considerably. This bears out the thinking of the petroleum industry that fuel octane numbers and compression ratios must advance hand-in-hand.

Interior Safety Checks

Safety-wise, the 1952 Pontiac rates above average, indicating a score of 62.5 points. This is based on the accompanying table which asks a total of eight questions about items we feel necessary for the safety of the driver and passenger. For each "yes" answer, the car receives 12.5 points, 100 points being the ideal.

INTERIOR SAFETY CHECK CHART

QUESTION	YES	NO
1. Blind spot at left windshield post at a minimum?		X
2. Vision to right rear satisfactory?	X	
3. Positive lock to prevent doors from being opened from inside?		X
4. Does adjustable front seat lock securely in position?	X	
5. Minimum of projections on dashboard face?		X
6. Is emergency brake an emergency brake and is it accessible to both driver and passenger?		
7. Are cigarette lighter and ash tray both located conveniently for driver?	X	
8. Is rear vision mirror positioned so as not to cause blind spot for driver?		X
TOTAL FOR PONTIAC CHIEFTAIN EIGHT:	62.5	

GENERAL SPECIFICATIONS

ENGINE

Type	L-head, straight 8
Bore and Stroke	3 1/8 x 3 1/8 ins.
Stroke/Bore Ratio	1.1:1
Cubic Inch Displacement	268.4
Maximum Bhp	122 @ 3600 rpm
Bhp/Cubic Inch	.46
Max. Torque	222 lbs.-ft. @ 2200 rpm
Compression Ratio	6.8:1; Optional 7.7:1

DRIVE SYSTEM

Transmission:	Conventional three-speed. Ratios: First-2.66:1, Second-1.66:1, Third-1.0:1, Reverse-3.02:1
Ratios:	First-3.82:1, Second-2.63:1, Third-1.45:1, Fourth-1.0:1, Reverse-4.30:1
Rear Axle:	Semi-floating. Ratios: Standard-3.9:1, Hydra-Matic-3.07:1
Hydra-Matic-3.07:1	

DIMENSIONS

Wheelbase	120 ins.
Tread	Front-58 1/2 in., Rear-59 1/4 in.
Overall Width	75 1/16 in.
Overall Height	63 1/16 in.
Overall Length	202 1/2 in.
Turning Radius	19 ft. 9 1/2 in.
Turns, lock to lock	3.75
Weight (Test Car)	3790
Weight/Hp Ratio	31.1:1
Weight/Road Hp Ratio	54.2:1
Weight Distribution (Front to Rear)	56.3/43.7

CHASSIS DYNAMOMETER TEST

1200 rpm (full load)	23.5 mph	37.0 road hp
2000 rpm (full load)	38.0 mph	60.5 road hp
3000 rpm (full load)	53.0 mph (max.)	70.0 road hp

TABLE OF PERFORMANCE

ACCELERATION TRIALS (SECONDS)

Standing start 1/4 mile	:21.62 (D-3)	:21.41 (L-D)**
0-30 mph	:05.77 (D)	:05.70 (L-D)
0-60 mph	:18.77 (D)	:18.83 (L-D)
10-60 mph in DRIVE		:15.37
30-60 mph in DRIVE		:12.49

*Shift using DRIVE only

**Shift from LOW to DRIVE

TOP SPEED (MPH)

Fastest one-way run	95.24
Average of four runs	92.88

FUEL CONSUMPTION (MPG)

(D-3)	(D-4)	
At a steady 30 mph	19.6	25.4
At a steady 45 mph	15.9	19.8
At a steady 60 mph	17.1	16.4
Average traffic	12.8	16.4

Brake Check

Stopping distance at 30 mph	40 ft. 4 ins.
Stopping distance at 45 mph	94 ft. 6 ins.
Stopping distance at 60 mph	198 ft. 11 ins.

SPEEDOMETER TEST

At 30 mph indicated 32 mph	6.7% error
At 45 mph indicated 48.5 mph	7.8% error
At 60 mph indicated 64.5 mph	7.5% error

OPERATING COST PER MILE ANALYSIS

1. Cost of gasoline	\$158.50
2. Cost of insurance	\$117.00
3. First year's depreciation	\$269.00
4. Maintenance:	
a. Two new tires	\$56.98
b. Brake reline	\$18.90
c. Major tune-up	\$10.85
d. Renew front fender	\$42.15
e. Renew rear bumper	\$34.60
f. Adjust automatic transmission, change lubricant	\$11.25

FIRST YEAR COST OF OPERATION, IN CENTS PER MILE .072

Cost Per Mile

You will notice this month that we introduced a new factor in our tests: operating cost per mile, as figured over a one-year period and assuming 10,000 miles of driving. Based on the assumption that the recommended gasoline is used in the car, the gasoline cost assumes a price of 25 cents for regular and 27 cents for premium grade. Insurance is based upon the most popular policy in a metropolitan area. Depreciation is based on Blue Book figures of depreciation for the period 1950-'51. Maintenance covers tires, running gear, engine work, body work, and automatic transmission, if any.

—The MT Research Staff

ALMQUIST

EQUIPMENT OF CHAMPIONS

UP TO
25% MORE POWER!

New Design...

DUAL MANIFOLD

NEW HI-VELOCITY RAM DESIGN! Improved "Equidistant" porting gives instant air-fuel distribution to all cylinders—Guaranteed to produce maximum speed and power! Shiny Aluminum—Streamlined—with cooling FINS! Smooth performance for road or track—Fits 1932 to '51 Fords & Mercs.....\$38.75
(Throttle linkage and generator bracket \$6.)

DUAL CARBURETION UNIT

FOR ALL CARS

Get amazing speed and acceleration this fast, inexpensive way! Aluminum "Equi-Flow" manifold steps up efficiency—eliminates fade outs! Easy installation on any 6 or 8 cylinder car.....\$12.95
(Throttle kit \$2.)

Hi-Speed V-8 Carbs., \$12.50

RACING FLYWHEELS

CAST IRON—18 lbs! Accurately machined & balanced. For road or track—
Fords & Mercs.....\$18.45
Aluminum Flywheels.....\$29.75

HI-SPEED IRON HEADS

Custom reworked to 8:1 ratios. Guaranteed performance for Road or Racing—
All V-8's.....Set, \$26.95

S-P-E-C-I-A-L-S

Adjustable Tappets
(Save \$5) Set \$11.95

Hot Rod Cams... 30.00

Hollywood Mufflers



for Rear Decks

Easily smooth off trunk lid—Open rear deck from inside of car!

Remote Control Kit \$1.98

DEALERS WANTED

Customizing Kit

BIG 1952 CATALOG!

Complete line of Racing, Hot Rod and Custom Equipment for ALL cars—at LOWEST PRICES! Includes FREE cash discount coupon!

PLUS FREE "H.P. Calculator"

All Three only 25¢

FREE HOT ROD BOOK

Send free with our new 25¢ catalog! Shows Speed Tuning, "Souping," Stock Car Specs, Economy Tips, etc. ALSO "How to build a championship engine."

"SAFE DELIVERY GUARANTEED"
Enclosed find \$.....□ Ship C.O.D.
Rush the following:

ALMQUIST ENGINEERING & MFG.
(Dealers Wanted) Milford 411, Pa.

OHIO'S FINEST IN FOREIGN CARS

SALES • SERVICE
PARTS • ACCESSORIES

- MG
- MORRIS
- SINGER
- DAIMLER
- BENTLEY
- ROLLS ROYCE
- HILLMAN MINX
- SUNBEAM TALBOT

AND . . . EXCLUSIVE DISTRIBUTORS IN OHIO AND MICHIGAN FOR THE SENSATIONAL GRAN SPORTS MODEL SIATA

Top trade for your old car. Financing arranged if desired

SPORTS CARS LTD.

4501 EUCLID AVENUE
Cleveland 3, Ohio Express 1-0717



STOP BURNING OIL! RESTORE COMPRESSION!

Fisher's Compression SEAL ONLY

\$395
PPM

Amazing Fisher's Compression SEAL will put new power & zip into your car. Because of friction, engines lose compression, become oil burners. A small amount of Fisher's Compression SEAL in each cylinder bore restores compression, stops piston slap & reduces oil consumption accordingly. Old, tired engines may not need expensive overhauling.

SATISFACTION GUARANTEED

If after having driven 400 miles, you are not completely satisfied with the new performance and oil savings obtained from Fisher's Compression SEAL, return the used tube for a full refund. \$25,000 indemnity insurance policy is your assurance that it will not harm the finest engine. Only \$3.95 postpaid or at your dealer. Write for free folder. Easily installed, send cash, check or money order.

ADVANCED ENGINEERING BOX 7013
Los Angeles 37, Calif. Dept. MA

WEIAND

FINEST POWER and RACING EQUIPMENT

Increase Power and Mileage with High Performance Heads and Dual Manifolds... STUDEBAKER • FORD • CHEVROLET • MERCURY
Send for COMPLETE CATALOG only 25¢

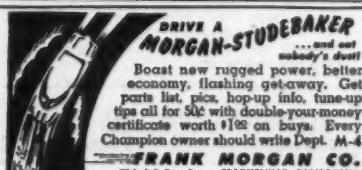
3737 SAN FERNANDO RD., LOS ANGELES 65, CALIF.



1952 EDITION

It's New! It's Different! Get world's largest Auto Accessory & Parts Catalog and save money. Over 30,000 items, including Hollywood Accessories, Hi-Speed Equipment, Rebuilt Engines, all types of accessories for cars and trucks. We have that Hard-to-Get parts. Janus packed with bargains. Completely illustrated (100 pages). Send 25¢ (refundable).

J. C. WHITNEY, 1917-AB Archer, Chicago 16



FRANK MORGAN CO.
Third & Eye St., MARYSVILLE, CALIFORNIA

SELL 'N' SWAP

Requirements are: copy limit of 25 words (not including name and address), first come, first served; we reserve the right to edit where necessary; we are not responsible for accuracy of descriptions although we will reject any misleading statements. This service is not open to commercial advertisers. No ads will be accepted if payment is not made in advance and such communications will not be acknowledged. Address your request to Sell 'N' Swap. The charge is just one dollar—Editor

IMPORTANT NOTICE! Only one CAR may be listed in any single Sell 'N' Swap insertion. This limitation will not apply to parts, catalogs, etc.

SELL OR SWAP-'30 Rolls-Royce P-1 Brewster limousine; new tires, battery, brakes, engine needs \$150 worth of work, body good. \$650 or swap even for classic phaeton. A. H. Cameron, 220 7th Ave. N., Texas City, Tex.

SELL—New Goodrich 33 x 5 tire, tube and flap, new handbook for '25 Maxwell, automobile ads '15-'41, soye Moto-meter and Stewart-Warner antique spotlight. R. L. Huriburt, 180 Shelburne St., Springfield, Mass.

WANTED—For '30 six cylinder Graham-Paige; door handles, fender well brackets to hold spare wheels, gas gauge, heat gauge, sun shield, owner's manual, what have you? E. V. Sanctuary, 150 Hotchkiss St., Jamestown, N.Y.

WANTED—'22 or older model T Ford. State price and condition. J. Beane, Arcanum, Ohio.

SELL—'41 Packard custom 180 with a LeBaron body. Want '41 Packard Six conv. Photo and description sent. D. B. Wentz, 72 San Benito Way, San Francisco, Calif.

WANTED—Supercharger for six cylinder General Motors diesel. Will buy outright or swap or sell my four cylinder GM supercharger with drive unit and manifolds. F. I. Sutton, Jr., Box 605, Kinston, N.C.

WANTED—Frontend two cam head for model T, or parts and castings for same. Need model T handbook also. State price and condition. M. Lee, 1359 S. Corona St., Denver 10, Colo.

WANTED—Complete top or set of bows for '35 Ford phaeton. Also need four 33 x 4 tires and tubes. E. W. Weaver, Burlington, W. Va.

SELL—'40 Continental conv. in good condition, new upholstery, good top, no rust, engine fair. \$1000 for '48 Dyna-Flow conv. in good condition. C. A. Beringer, 2512 N. Kildare Ave., Chicago, Ill.

SELL—'36 Ford two-door trunk sedan. Has '41 V-8 engine, hydraulics, sealed beams, needs clutch and some engine work. Car in poor shape, but good for modifying. \$100 cash. B. L. Prickett, c/o Mr. J. W. Davidson, Waterford, Va.

SELL OR SWAP—'41 Buick Roadmaster four-door conv. sedan; good running condition. \$250 or swap for '40 La Salle conv. Photo available. P. Coughlin, 8122 Senator, Detroit 9, Mich.

SELL—'19 V-8 Oldsmobile touring; original condition, body and chassis good condition. Sullivan & Murphy D X Service, 333 S. Odell St., Marshall, Mo.

WANTED—MG TC English sports car. Must be in good condition. M. Clausen, c/o Flindt Orchestra, McCurdy Hotel, Evansville, Ind.

WANTED—Literature and pictures on Pierce-Arrow automobiles. Also combination radiator cap and ornament for '32-'38 Pierce-Arrows. State condition and price. T. C. Murray, 301 Ridgeway Ave., Rochester 13, N.Y.

WANTED—Hi-compression head and/or dual manifold for '48 or later Hudson Commodore Six. H. M. McMore, Box 242A, W.A.F.B., Dayton, Ohio.

WANTED—Catalogs on Lincoln, Stutz, Duesenberg, Pierce-Arrow, or other classics. Will pay premium price for outstanding examples. Send description and price to P. H. Peterson, 1809 S. Duluth Ave., Sioux Falls, S.D.

SELL OR SWAP—'32 V-12 Cadillac custom Fleetwood roadster; original, engine, body perfect. Only one in captivity. Best offer or swap for sports car, speedster, phaeton or? J. Flynn, Box 124, East Santa Cruz Station, Santa Cruz, Calif. Phone 4913-M.

SELL—Brand new V-8 60 midget, Hillegass body, front, light rear, gear box, four changes. Engine has chromed cylinders. Pounder mag, Edelbrock heads and manifold, Winfield cam. L. Argersinger, Chittenango, N.Y.

WANTED—'26-'30 low mileage, wire wheel Lincoln or comparable make. Also 7.00 x 17 passenger tires or no. 3001 headlight bulbs for '33 Cadillac. Van Cleese Foundation, Box 1323, Little Rock, Ark.

SELL—Auto sales catalogs; Packard, Cad, Lincoln, etc., min. \$5. each. For details, send large stamped addressed envelope. A. Twahy, 400 N. Kenmore, Los Angeles, Calif.

SELL—'34 custom Packard V-12 executive coupe; original condition, body good, engine excellent. \$500. Z. A. Pachanian, 88 June St., Worcester, 2, Mass.

SELL—'48 Lincoln conv.; new top, radio, overdrive, electric windows, heaters, spotlight, directional signals, Goodrich whitewalls, \$950. J. Kinn, 7134 N. Beach Drive, Milwaukee 11, Wis.

SELL—'36 Ford roadster; very clean, body solid, original paint, chrome and upholstery good, white-wall cushion tires, strictly stock, make good hot rod. R. W. Humbert, 361 Cliffside Dr., Columbus, Ohio.

SELL—Never used H & C full cam, set of 3 1/8 JE piston and rings, Spaulding dual ignition, outside headers, heavy main caps, Knudsen (12-) head; for early Ford 6. B. Forney, 135½ So. Hazelwood, Youngstown, Ohio.

SELL OR SWAP—'36 Ford roadster, '40 chopped windshield and padded top. Over \$1000 spent to put in perfect shape. Want Cord or Continental. Exchange photos with you. R. A. McKinney, 2005 Lexington Ave., Springfield 13, Ohio.

SELL—'16 Buick D-44 roadster, light six series, just like new, perfect cross-country car, new tires. \$950 for quick sale. A. Walker, Box 65, Pebble Beach, Calif.

WANTED—'32-'38 Duesenberg restored or unrestored. Give full information, model, year, condition and price. Will promptly pay cost of required photo. Write me today. E. A. Rogers, 10544 Wyton Dr., Los Angeles 24, Calif. Arizona 97184.

SELL—'37 Cord sedan; Cadillac engine, fluid drive, front wheel drive, electrical shift, new radiator, U-joints, brakes, tires, upholstery. \$1500. Might consider trade. MacCoon, Box 9216, Sta. S, Los Angeles 4, Calif. DUnkirk 74213.

SELL OR SWAP—'35 Packard club sedan. Good throughout with new battery and good tires. \$4400 when new, will sell for \$275, best offer or what have you? J. Wise, 3930 Los Feliz, Los Angeles, Calif. NO 15846.

SELL—Model J Duesenberg seven-passenger sedan. 265 hp, possible top speed of 120. \$100 or best offer, needs restoration. Sgt. G. Forston, 3599 Tr. Sq., MAFB, Las Vegas, Nev.

SELL—Modified '37 Ford stock sedan car complete \$200. Or will sell engine only. \$150. '37 block, bored 1/8, stroked 1/8, just built. B. George, 2418½ S. Hope, Los Angeles, Calif. PR 5860.

SELL—'41 Lincoln Continental conv; over-drive, new white walls, good engine, good top, excellent condition. \$800. Also Lincoln engine 50 model just overhauled. \$175. W. E. Emmons, 1016 Grand St., Artesia, N.M.

WANTED—Doble steamer, write giving information and price. D. M. Van Evera, 3501 Coolidge Ave., Baltimore 29, Md.

SELL—'37 Cord Beverly sedan, unblown in excellent condition, stock throughout. Fourteen coat lacquer job, new tires and battery. Included 1/2 ton spare parts. \$845. B. E. Tomlinson, 1017 W. Nixon, Pasco, Wash.

SELL—'40 T Hudson coupe, 112 in. wheelbase, '41 Pontiac 8 engine, transmission and rear. Engine recently overhauled. Good tires, battery, 7 1/2 head. Fast. Needs customization. \$250. B. Cliff, 5934 Felske Dr., Brighton, Mich.

SELL—'41 Lincoln Zephyr three-window club coupe. Dechromed, primer finish, '48 Mercury engine. '42 Lincoln rear fenders with car. Best offer takes. D. Power, 2321 S. 9th St., Springfield, Ill.

SWAP—'50 Buick Roadmaster conv., loaded with extras, \$200 Buell air horns, 16,000 miles, cost over \$4000, like new. For Jaguar or Riley sports model. A. Wall, 27 Primrose Dr., New Hyde Park, N.Y.

WANTED—'39 Ford conv. coupe with rumble seat. Must have good body and frame. Mechanical condition is not important. State price and condition. R. J. Wilkinson, 3888 E. Franklin Rd., Jackson, Mich.

WANTED—Will pay \$1000 for an '06-'10 Stanley steamer roadster if in running condition, or \$500 for one needing restoration. A. Walker, Box 65, Pebble Beach, Calif.

SELL—'06 four-cyl. Franklin air-cooled roadster, good condition, rare model; famous "cross-wise" engine, very powerful and fast. New top and tires. A. Walker, Box 65, Pebble Beach, Calif.

SELL—'13 Buick chassis all but body and tires. \$75. W. S. Huffman, 314 E. Walnut, Kokomo, Ind.

SELL OR SWAP—Duesenberg-Rollson unique sport sedan, latest model. Mint condition, customized linen top, sunshine roof, terrific performance, sleekly beautiful. Consider trade. Three photos, date sheet, \$25. W. C. Wilkinson, 1920 E. Copper St., Tucson, Ariz.

SELL—'33 Packard Dietrich conv; excellent condition, new top, engine overhauled, good tires, body. \$600. B. Jones', 2725 Riverside Blvd., Sacramento, Calif.

WANTED—Information on how to upholster and pad a '39 Mercury dashboard and any photos of same completed. V. Dunlap, Center, Ind.

SWAP—'41 Oldsmobile Hydra-Matic transmission in good condition, complete with column shift, linkage, flywheel, and bell housing for Mercury engine or Ford speed equipment. W. G. Goss, 22 Perkins St., Arlington 74, Mass.

SELL—'49 Dodge roadster fully customized; mold-ed fenders and trunk dechromed, lowered twin spots and pioes, skirts, Mallory ignition, lacquer finish, price \$1100. Photos on request. D. White, 2426 Westbrook Dr., Franklin Park, Ill.

SELL—'23 Cadillac V-8 touring. Will sell all or parts. Rear seat missing. I need 33 x 5 tires. R. Rudel, Fessenden, N.D.

WANTED—'34-'40 Rolls-Royce four-door sedan. Send complete details, picture and name of body maker to D. Langdon, Hinckley, III.

WANTED—V-8 street roadster or custom conv. for street and road use only. Must be A-1, no junk. Send full specs, conditions, photo and cash price. L. M. Divinia, 115 S. Battin, Wichita, Kan.

SELL—'37 Buick Century conv. sedan, side mounts, radio, heater, good top, good tires. \$150. J. Kinn, 1314 N. Beach Drive, Milwaukee 11, Wis.

WANTED—'34 Ford V-8 conv. in very good shape, particularly the body and windows. Capt. J. Davies, 1314 Hudson Dr., Enid, Okla.

SELL-'51 Frazer Manhattan conv. sedan with hopped-up Oldsmobile Rocket engine. 13,000 actual miles, 0-50 mph in nine seconds. Beautiful blue nylon top, \$4500. V. R. Hughes, 822 North 7th Ave., Bozeman, Mont.

WANTED—Pair of new or used aluminum heads for a '51 Ford V-8. 8:1 preferred. Also Thompson Vitameter. State price, make, condition. J. G. Molloy, R.E.A. Garage, 609 S. Second St., Elkhart, Ind.

SELL-'48 Lincoln Continental conv; radio, three heaters, overdrive, tan with black top, white sidewalls, brown leather interior, only 35,000 miles. E. M. Roberts, 618 E. Van Buren St., Ottawo, Ill., 2304-W.

SELL OR SWAP—Woods-Mobilette cycle car, 12 hp, four cylinder, car #635, model five. Restorable condition. Swap for antique car preferably steam or sell outright. Photos on request. R. G. Sherler, 112 Old Gilmore Rd., Portsmouth, Va.

SELL OR SWAP-'41 Lincoln Continental hardtop in decent condition. Plastic upholstery. \$595 or trade for anything on wheels. K. Hill, Readisbury, Vt.

SELL-'48 Ford coupe, dark green. Hollywooded, full house engine, very fast, 9100 miles on engine and whitewalls. Body and interior immaculate. \$1450. D. Alexander, Bellevue, Peoria, Ill., 3-4049.

WANTED-'40-'42 Lincoln Continental coupe or conv. E. Fuller, Box 628, Salina, Kans.

SELL-Custom Merc-A-Baker, MT Dec. '50, low: 60 ins., powerful $\frac{3}{4}$ cam $\frac{1}{2}$ over, dual balanced, sleek, leadened in fenders, lights, custom upholstered. \$1695. O. Crain, 1462 N. San Gabriel Blvd., San Gabriel, Calif.

SELL-'18 Rauch and Lang Electric coupe complete with Delco battery system and charger. Good mechanical condition, body easily restorable. Would deliver. M. W. Tarbutton, 1207 Maple Ave., Zanesville, Ohio.

WANTED-'40 or '41 Lincoln Continental hardtop in decent condition. Send complete information and photo if available. W. Haynes, 261 Day St., New Haven, Conn.

SELL-'30 Duesenberg touring, mechanically good, needs body work. Picture pg. 6, Dec. '50 MT. \$1195 FOB. D. Lovelace, 3816 Shasta, San Diego, Calif.

SELL-Slightly used speed equipment for '49 Plymouth: Edmunds 8.5:1 compression finned aluminum head, \$30. Thompson Vitameter \$15. Both for \$40 if desired. C. R. Servison, 19½ N. Federal Ave., Mason City, Iowa.

SWAP—I have \$2000 worth of commercial refrigeration equipment to swap for Rolls, V-16 Cadillac or Stanley Steamer. Write details and I will answer with description. D. B. Haskell, 62 Ashland St., Holliston, Mass.

SELL-'32 Chrysler Imperial 8 four-door conv. sedan, model CH. Side-mounts and trunk. Good body, fenders and running gear. No rust. Running condition, needs some mechanical work. \$375. R. C. Burchill, 251 Beat St., East Lansing, Mich.

SELL OR SWAP-'49 Harley Davidson motorcycle, model 45, white, exceptional condition, 8000 miles. \$500 or good sports car. Can pay difference. R. M. Landau, R.D. 1, Library, Pa.

SELL-'31 Hudson four-door sedan, coachwork by Murray on 124 in. wheelbase; sidemounts, body in mint condition, needs motor work. Factory no. 62513, engine no. 53265, wt. 3235. Photos on request. Sgt. J. Vuckovich, 788 A.C. and W., Sqdn., Waverly, Iowa.

SELL-'32 Auburn eight cylinder brougham. Engine completely rebuilt, spent \$1100 restoring. Two-tone \$175 lacquer paint. Perfect condition except upholstery. Best offer over \$600 or trade. B. Justis, 416 N. Rose Ave., Compton, Calif. NEwmark 52135.

SELL OR SWAP-Two JAP speedway racing bikes, new engines. Extra new mag and tire and trailer. Ready to race. Attention 500cc builders. M. Kirschner, Box 734, Vista, Calif.

SELL-'52 Mark II MG, only 900 miles. Owner sent overseas. All extras, including seven-band radio, heater, tonneau cover. As equipped cost \$2700. Price \$2450. Mrs. J. A. Cunningham, 442 N. Austin Blvd., Oak Park, Ill., EU 6-8932.

SWAP-'30 Ford roadster, '36 V-8 engine; complete car running but poor condition—for A or B overhead road engine only, complete, running. F. A. Usher Jr., 6764 Wedgewood Place, Los Angeles 28, Calif. GL 5800.

SELL-'25 Studebaker brougham sedan, top and upholstery like new, 45,000 miles. Runs fine. Sell or trade for four 7.60 x 15 new tires. W. R. Cotter, 99 Jersey St., San Francisco, Calif.

WANTED-Drum-shaped cowl lights from '25-'26 Nash sedan, also Delco combination light and ignition switch for above and 6.00 x 21 (34 x 6) tires. PFC F. W. Grugel, US 5512566, 8 Bry, 449 F.A.O.B. BN., Fort Bragg, N.C.

SELL OR SWAP-'38 Cadillac Fleetwood 60 in good condition; best offer or swap for Rolls-Royce, Duesenberg, or '37 Cord in good condition. J. Tondrowski, 15 Payne Ave., N. Tonawanda, N.Y.

WANTED-Front wheel hub and brake drum for '41 Hollywood Graham. Will give reasonable price and freight charges. Prefer standard size drum in good condition. R. Greenwood, 425 E. President St., Tucson, Ariz.

SWAP-MG TD, heater, windwings, 10,000 miles, perfect. Want Oldsmobile 88 or Pontiac in similar condition. No automatic transmissions. J. C. Hall, 1101 Poplar Ave., Apt. 6, Memphis, Tenn.

At Last a DEGREE WHEEL!

THE ANSWER TO YOUR SPEED SECRETS

Net \$19.95 Net \$12.95

Send money order. We will mail postage—or will ship C.O.D. in U.S.A.

EXHAUST BAFFLES

Retail \$3.95

SO-CAL SPEED SHOP \$2.00

Fits in center of exhaust port of V8. Cools engine, adding horsepower. Fits Fords or Mercs. through '48.

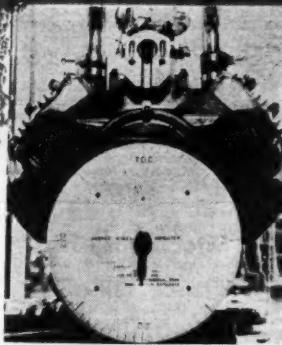


Adjustable Steering Arm

Retail each \$19.95. Fits Fords or Mercs.

Lincoln-Zephyr thru '48.

NET EACH \$14.95



We can build an engine like this
Send 25c for new wholesale and retail
illustrated catalog

HONEST CHARLEY SPEED SHOP

POWER PLUS! ECONOMY!!! PERFORMANCE CLARK HEADERS

AS
LOW AS
\$2750

The KEY to a well balanced exhaust system

• ENGINEERED TO FIT YOUR CAR • GUARANTEED TO SATISFY
Made of Extra Heavy Gauge Steel Tubing. Excellent Workmanship.
INCREASE YOUR H.P. • GAS MILEAGE • MOTOR LIFE with a
minimum amount of EFFORT, TIME, & \$\$\$'. STOP THAT PING!!

DEALER INQUIRIES INVITED
LOWER BLOCKS FOR ALL CARS
OVER ONE MILLION IN USE

Give your car a low, sleek, streamlined "look". Increased safety at high speeds. CLARK lowering blocks can be installed in 30 MINUTES. Everything is furnished.

MAKE	1½"	2"	3"
Chev.	\$3.00	\$3.50	\$5.00
All others	3.50	4.00	5.00
Wide Springs	5.00		

On orders for Headers or lowering blocks specify year, make & model. Include 50% deposit for C.O.D. orders. Write for complete line.



LOW PRICES

- V-8 FORD & MERCS
1932-51 . . . ONLY \$27.50
- SPECIAL CHEVROLET
1937-51 . . . ONLY \$34.50
- CADILLAC
1949-51 (including extensions) . . . \$40.00

Clark Header Co.

7018 Firestone Blvd., Dept. MT-4,
Downey, Calif. • TOpaz 2-7784

SO-CAL

LET KONG BE YOUR GUIDE TO PERFECT IGNITION IN '52

For Championship

The "CHAMPIONSHIP" KONG has dual hi-speed points—4-lobe Winfield breaker cam-mounted on two hi-speed ball bearings—full manual control (lock type) 90° advance, 90° retard—lock on base (besides manual control).

The complete KONG (including condensers and manual control cable) . . . \$63.50

For Top Stock Performance

The KONG "ADD-A-POINT" is the finest of dual point conversion kits for '49-'52 Ford. Easy to install, completely dependable, all components genuine Ford. Saves your points, increases efficiency. \$5.55



Send for the 1951 SO-CAL CATALOG—with the complete listings of the top speed and power equipment, illustrations, displacement charts, performance hints . . . and the Special Discount slip that saves you \$5.55 . . . 50¢

SO-CAL SPEED SHOP
1104 S. Victory Blvd., Dept. MT Burbank, Calif.

CH. 0-4484

Floyd Clymer's POPULAR MOTOR BOOKS

New Titles - Just Out!

SPEED FROM THE SPORTS CAR

New textbook for the sports car enthusiast, with specific data on speed tuning the engine for increased power and efficiency, compiled by "Calculus." Tells how to improve volumetric efficiency, valve and block modifications, care of cylinders and pistons, proper cam design, lubrication details, cooling problems, ignition, fuels, etc. Full chapter on supercharging, correct installation, and information on engine balancing, final assembly. 192 well-illustrated pages. Postpaid.....\$2.00

AUTOCAR ROAD TESTS

Complete tests, performance data, specifications—Allard, Austin, Aston-Martin, Bentley, Daimler, Dyna, Ferrari, Fiat, Consul, Humber, Jaguar, Jensen, Jowett, MG, Morgan, Morris, Packard, Renault, Rover, Standard, Sunbeam, Triumph, Vauxhall, Wolseley. Interesting, educational, informative. Postpaid.....\$1.50

PLYMOUTH OWNER'S HANDBOOK

(Covers all Chrysler products)

This new book covers completely the servicing and maintenance of Chrysler products. Chock full of charts, drawings, photos, 152 informative pages. All parts discussed, including engine overhaul, transmission, rear axle & differential. Special attention given to care of shock absorbers, brakes, and steering, and a section on body and finish included. All authentic material. Postpaid.....\$2.00

AUTO OWNER'S COMPLETE HANDBOOK

A new repair manual clearly written for the layman . . . 232 pages, over 300 drawings, charts, illustrations. An authoritative guide for any automobile owner interested in maintaining his own car. Explains simple home-workshop machining methods, chassis and suspension repairs—complete descriptions on springing, shock absorbers, brakes, as well as engine overhaul, fitting of new parts. Clutch, transmission, and differential problems dealt with in detail, and complete instructions on electrical and ignition systems, carburetion, and tuneup. Special section on anti-friction bearings as used in the wheels, drive gear, axles, and transmission. Postpaid.....\$2.00



How to Hop Up Chev. & GMC Engines—Brand new speed manual has 160 informative pages \$2.00

How to Hop Up Ford & Mercury V8 Engines—Latest data on speed tuning, short cuts to power \$2.00

Seizing the Stock Engine—Best book available on the subject, all-new data, 192 pages...\$2.00

Ford Owner's Handbook—Complete maintenance, repair of all models from 1932, incl. Ford 6, \$1.50

Chevrolet Owner's Handbook—Timely service information on all models from 1929.....\$1.50

FREE! catalog of 100 CLYMER MOTOR-BOOKS plus—a litho-photo showing

AMERICA'S FASTEST CAR . . . The 230 m.p.h. CLYMER MOTORBOOK SPECIAL, with Driver Willie Young, Builder Bill Kenz, and Sponsor Floyd Clymer. **WRITE TODAY—it's FREE!**

FLOYD CLYMER MOTORBOOKS

1268 S. Alvarado, L. A. 6, Calif.

ORDER BLANK

All Books Postpaid

SEND FOR FREE MOTORBOOK CATALOG

FLOYD CLYMER MOTORBOOKS

1268 S. Alvarado, MT-4, L. A. 6, Calif.

Please send books marked to:

NAME _____

ADDRESS _____

CITY & STATE _____

SELL—'36-'37 Cord hub caps heavy copper and chrome plated. Both sides highly polished, \$10 each plus postage. Also many other body parts. D. White, 1325 Fruitvale Ave., Oakland, Calif. **SWAP**—'49 Buick Roadmaster sedan for '48 Lincoln Continental in absolutely perfect condition throughout. J. Ayres, 325 Washington Ave., Jersey, Pa. Phone 718-R.

SELL—'49 Mercury conv., Tampico red, 42,000 miles. All accessories but overdrive, new top, rings and bearings. Will supply accurate information. Original cost \$3200, will sell for \$1300. G. Schramm, 1030 S. Elmwood, Oak Park, Ill. **WANTED**—37 x 4½ tires for my '13 Stevens Duryea. Any leads or suggestions appreciated. N. L. Kemble, 518 33 St., Bakersfield, Calif. **WANTED**—Glove compartment door for model '35-'50 La Salle with built-in clock. Clock must be in restorable condition. J. R. McNeish, 42 Broadway, Rock Springs, Wyo.

SELL—OR SWAP—'38 Packard Super Eight, four-door sedan in fair condition, radio and heater. 45,000 miles, 3500 miles since ring and valve job. Best offer takes. R. F. Schulze, 1104-13th Ave., So., Nampa, Idaho.

WANTED—Dual manifold, carbs and linkage for Oldsmobile Rocket V-8. Also both rear fenders from '50 or '51 Cadillac conv. W. Mayo, 1707 W. 5th Ave., Spokane, Wash. **WANTED**—Wills St. Claire, any model, any year. Send picture if possible. B. Christian, 839 Marsh Rd., Menlo Park, Calif. **SELL**—'36 Auburn, 4,000 miles since engine re-bored. Also have parts for same car, aluminum head, supercharger, transmission, Columbia two-speed rear end, and many other items. C. Foss, 4 E. Lake St., Addison, Ill.

SELL—'40 Ford coupe with pick-up body, '46 Mercury engine, '45 transmission, '60 rear, dual exhaust system. Perfect for stock car conversion, good rubber. \$500. J. C. Griscom, 435 King St., Woodbury, N.J.

SELL—Auburn 851 supercharged fishtail speedster. Recent complete mechanical overhaul, including supercharger, re-lacquering, re-upholstering, replating, new tires, cost \$1500. Car perfect throughout. Entering service, \$1200 cash. H. M. Resch, 1395 Vine St., San Jose 10, Calif.

SELL—'51 Jaguar XK 120, red with red and cream interior. Needs no recommendation, beautiful condition. Spare parts, tools and extras. Undercoated for protection. Dunlop racing tires. L. Oberg Jr., 3355 Denver St. S.E., Washington D.C. Phone Victor 1334.

WANTED—'13 or older Model T Ford in restorable condition or better. Details and price in first letter. Luke's Service, 649 N. Broadway, Escondido, Calif.

SWAP—'41 Indian Four motorcycle, looks good, runs fine, good rubber. Trade for hi-compression head, dual manifold and pots for '47 Kaiser or ? C. Bartlett, Downieville, Sierra Co., Calif.

WANTED—'36-'37 supercharged Auburn speedster in good condition. Send photos and information. Also some model Cord. State price. L. M. Fieldshow, Rt. 7, Box 336, Salem, Ore.

SELL—'36 Cord, model 810, new tires, paint, and chrome. Engine OK, transmission needs work. \$600 cash or late pickup truck. H. R. Endly, 3043 Newell St., San Jose, Calif.

WANTED—Rolls-Royce roadster, phantom or conv.

Must be reasonably priced, and in good running condition. Top, upholstery, and paint unimportant if body is sound. N. M. County, 2335 Goodrich St., Ferndale 20, Mich.

SELL—Allard 2B roadster with or without 200 hp Oldsmobile Rocket engine. Will accept good open body Rolls-Royce in trade. Make offer. N. M. County, 2335 Goodrich St., Ferndale 20, Mich.

WANTED—Automatic or one-shot lubrication system off of wrecked car. Lubricator or complete system. Must be cheap. Also water injector. A. H. Shum, Box 1072, Hollywood 28, Calif.

WANTED—Someone to furnish and install Oldsmobile Rocket engine and hydraulic in '52 Chevrolet Power Glide in exchange for cash and my engine and transmission. J. Becker Jr., 1830 Charles St., Springfield, Ohio.

SWAP—Two-seater racing body and frame, '40 Mercury engine, ported and relieved, head and tail lights. Needs some work. For roadster with weather protection. M. L. Trabert, 207 N. McLean Blvd., Elgin, Ill.

SELL—Auto sales catalogs: Packard, Cadillac, Lincoln, Oldsmobile, and foreign cars, minimum \$3 each. Moto. (N.Y.) Annuals. Details for large, stamped self-addressed envelope. A. Twohy, 400 N. Kenmore, Los Angeles, Calif.

SELL—Plans and instructions for building high-speed fuel injector for sports and road cars. Adds methanol, nitro, hot fuel to regular carb. mixture. Fuel information included. \$1. C. Langnecker, Jr., 1205 Penn Ave., New Brighton, Pa.

SELL—Air compressor, Lockheed-Wagner vacuum-driven, ideal for air-horns, capacity 100 psi. New condition \$30. S. Duncan, 4302 Decourcy Ave., Covington, Ky.

SELL—'32 L29 Cord conv. sedan in good running condition. Needs some body work, \$200. J. S. Azot, 35 S. Dawes Ave., Kingston, Pa.

SELL—'32 Auburn 8-98 conv. sedan in very good condition. \$350. J. S. Azot, 35 S. Dawes Ave., Kingston, Pa.

SWAP—Miniature Speed Graphic or Leica 3c with two lenses and Imarect finder, with Federal or

Omega enlargers and appropriate accessories for classic or sports car of '30s. J. R. Monahan, 2128 Niles Ave., St. Paul 5, Minn.

SELL—'32 V-12 Cadillac conv. windshield, headlights, parking lights, and two 6.00x18 six ply tires, new Firestones. Also '48 Johnson 16 outboard, just overhauled. For what have you? Prefer equipment for my '42 Ford coupe. E. Jochim, Box 588, Mastic, L.I., N.Y.

SELL—Mercury block, big ports, relieved, 3½ in. bore; new, complete, late Ford valve assembly, big intake valves, special pistons, pressure tested, no cracks, \$100. D. Randle, 225 West 31 St., Long Beach, Calif.

SELL—Four 32 x 4½ tires and five tubes. All in good condition. H. Stubbs, 2760 Grenville St., Oroville, Calif.

SELL OR SWAP—'29 Marmon conv. sport coupe, model 78. New top, paint, clutch, etc.; recent engine overhaul. Pictures and details on request, \$200 or classic car trade. E. Kramer, 12 Seaver St., Roxbury 21, Mass.

SELL OR SWAP—'36 Packard 12 Dietrich conv. sedan, ride control, automatic lubrication, body and engine good. Trade for what have you? R. G. Swacina, 2208 Carroll St., Oakland 6, Calif.

SELL OR SWAP—Wrecked and partially repaired '49 hydraulic Oldsmobile 76 station wagon, 1400 actual miles, new cowl and frame. Swap for custom classic or sports car, any condition. J. W. Naetzke, 715 Ivy St., Pittsburgh 32, Pa.

SELL—'25 Franklin sedan, 16,000 actual miles, absolutely immaculate inside and out, engine A-1. As clean as the day it was sold. Best offer over \$750. P. L. Endicott, 632 N. Stafford, Portland, Ore.

SELL—'29 Marmon Eight, 36,000 actual miles, six wire wheels, very nice condition. Best offer over \$350. P. L. Endicott, 632 N. Stafford, Portland, Ore.

WANTED—'41 Lincoln Continental conv. Please send complete information, price and photographs. Also an original owners' guide to '36 Ford roadster. Cadet F. W. Edmondson, 205 Pennsylvania Military College, Chester, Pa.

SELL—for \$350 front wheel drive race car. Two-part Riley head, model A full race engine, quick detachable wheels. No photos, just telephone. H. Marth, Herman, Minn.

SELL—'41 Cadillac club conv. New shocks, nearly new engine, body, paint, upholstery, whitewall tires, and top all excellent. Truly a beauty. T. Sgt. H. C. Baker, 250 S. Clarkson St., Denver, Colo.

SELL—'27 Buick four-door sedan. Excellent both exterior and interior. One owner, \$200. H. L. Schoff, Box 12, Honeoye Falls, N.Y. Phone 71W.

SELL—'33 Chrysler coupe, six wire wheels, ideal for custom sports job. Excellent condition both exterior and interior. \$100. H. L. Schoff, Box 12, Honeoye Falls, N.Y. Phone 71W.

WANTED—Radiator name plates from obsolete make automobiles. A. W. Burr, No. Clarendon, Vt.

SELL—Shaw special, 94 in. wheelbase, underslung rear, 4 semi-elliptic springs, eight friction shocks, two Winfield carbs., Bosch magneto, seven 17 in. Dayton wheels, towbar, \$275. R. E. Scherr, 6 Chesterfield Rd., Winchester, Mass.

SELL—'31 Buick conv. with rumbleseat, model 90. Engine and body very good, rear end fair. Top six months old. Owner drafted, best offer takes. J. D'Agostino, Jr., 1737 Williamsbridge Rd., Bronx, N.Y.

SELL—'37 Packard, 12 cyl., four-door conv., 50,000 miles, needs no restoring, perfect condition throughout. Pictures and price sent on request. Will consider trade. J. A. Veilleux, 140 Summer St., Pittsfield, Mass.

SELL OR SWAP—'49 Mercury conv., new paint and top, overdrive, radio and heater. Want '49-'50 Ford conv. W. D. Kennedy, 139 Lake St., Englewood, N.J.

WANTED—'37-'39 Packard 12. Body and chassis only, or complete. Body must be solid, clean inside. Must be reasonable, fairly near Detroit. J. Darrow, 35 S. Biggs, Beaufeville, Mich.

SWAP—'32 Lincoln touring, 21,000 miles, six perfect tires. Will trade for Steamer or right hand drive Pierce touring. The Lincoln is for swap only. N. Bolan, Jr., 709 Glenshire Ave., Cincinnati 26, Ohio.

WANTED—8 or 8.25: heads, semi or ¾ cam for '49 Lincoln Cosmopolitan. Any other equipment for above car. Give complete description and price. W. H. Eggleston, Jay, Okla.

SELL—'36 Graham supercharger with gears, carb., good condition. Or whole engine, poor but runs. Good clutch and transmission. First fair offer. T. Luse, Coldwater, Kans.

SELL OR SWAP—'46 Mercury conv., whitewalls, radio and heater, smitty, custom grille, metallic green paint job. Or swap for '32-'34 Ford coupe in good condition with hot engine. J. W. Alexander, 3254 Ravenswood Ave., Chicago 13, Ill.

WANTED—'31 Buick coupe, any series, with rumble seat, fender wells, wire wheels. Please state full details in first letter and snapshot if possible. R. N. Licari, 203 E. Oak St., Alexandria, Va.

WANTED—Two-man race car for conversion to sports car. Age and engine unimportant if price low. Full description and photos requested. Will return photos. W. Mulhall, Shano Bldg., Idaho Falls, Idaho.

SELL—'32 Ford roadster, body in perfect condition; fenders, running boards and grille perfect. More information and pictures available upon request. Car is practically stock. J. Apple, Jr., 1006 Ridge Rd., Columbia, Mo.

SELL OR SWAP—'27 Buick sports touring California top. Or trade for '28-'32 roadster or what have you? W. Hantsbarger, Jr., Meriden, Iowa.

SELL—'27 Pierce-Arrow Brougham, series 80, very good condition, can be driven anywhere. A. V. Zimmerman, 33-35 Atlantic St., Salamanca, N.Y.

SELL—Foreign, domestic car photos, 11 x 14 in. glossies, over 350 coachwork masterpieces available. Six photos for \$5. Start building your collection today, no lists. A. W. Shanen, 2444 S. Orkney St., Philadelphia 48, Pa.

SELL—Fiat 1100cc Pillarless sedan '46 m.d. in excellent condition throughout, \$650. R. E. Brown, 7505 N. Curtis Ave., Portland, Ore.

SELL—GMC model 71 blower, gear, rotors, bearings and case in perfect condition. Overhauled by competent GMC mechanic. Never used since.

Asking price \$125. L. Galleri, 1335 Cass SE, Grand Rapids, Mich.

SELL OR SWAP—'50 De Soto conv., low mileage. For Ford, Mercury, MG, Jaguar or what have you? Prefer another conv. S. A. Brugman, 505A Bain St., Dexter, Mo.

SELL—'39 Cadillac V-16 classic sedan, six white-walls, radio, heater. Body, fenders, engine, interior and finish in good condition. T. R. Williams, 68 S. Washington St., Wilkes-Barre, Pa.

WANTED—Jaguar Mark IV drop head coupe. Must be in good condition. Wrecked or abused car not wanted. Send complete description, photo, and final price. A. L. Von Rump, 411 Seekamp Ave., Kirkwood, St. Louis 22, Mo.

SELL—'36 Packard Super Eight, four-door phaeton, Dietrich body, including spare parts. Engine recently rebuilt, new top, good curtains, six good tires, body and interior excellent. Best offer. R. I. Morehouse, 1124 Sperry Ave., Bremerton, Wash.

SELL—Grand Prix V-8 magneto, used 10 hours. Original cost \$200, best offer takes. New Winfield semi-can and Johnson adjustable tappets for Ford-Mercury. R. W. Schlacter, 215 Ridgeway Rd., Lexington, Ky.

SELL OR SWAP—'48 Lincoln Continental coupe in tip-top condition; my hobby since new. Will take ceiling price of '51 MG on ceiling price trade basis. Capt. J. P. Davies, 1314 Hudson Dr., Enid, Okla.

SELL OR SWAP—12 cyl. '27 Packard limousine suitable for parts. Also spare Packard 12 cylinder engine. For four cyl. motorcycle and 16 cyl. Marmon engine. Best offer. J. Pagano, 32-28 105 St., East Elmhurst 69, N.Y.

SELL OR SWAP—12 cylinder '39 Packard formal five-passenger limousine, six wheels, hard leather top. Interested in four cyl. motorcycle and 16 cyl. Marmon engine. Best offer or trade. J. Pagano, 32-28 105 St., East Elmhurst 69, N.Y.

WANTED—'04-'15 Buick, any body style, in good condition. In or near Calif. R. Danielson, 4290 Fairfield St., Eureka, Calif.

WANTED—'08-'15 Ford, any body style, in good condition. In or near Calif. R. Danielson, 4290 Fairfield St., Eureka, Calif.

SELL—'32 rare V-12 Cadillac phaeton custom Fleetwood aluminum body, chromium wire wheels, prime condition, low mileage. \$1175. P. Hammes, Dravo D-301, Lehigh Univ., Bethlehem, Pa. Phone Beth. 8-2041 after seven pm.

SELL OR SWAP—Cord 810 conv. parts, engine, transmission, drive, wheels, etc. Want 810 or 812 sedan body or Lincoln Continental without engine and running gear. E. W. Connell, 306 Watson Dr., Warner Robins, Ga.

WANTED—'42 Lincoln 12 conv. in fair condition. Send photographs, price, etc. W. C. Parker, 1807 Monroe St., Ft. Wayne, Ind.

SELL—'31 Chrysler model CJ sports roadster in good condition, make offer. T. Kovach, 4211 Beachway Dr., Tampa 9, Fla.

SELL OR SWAP—'36 Ford roadster partially restored, gray primer paint, new plastic upholstery, '38 engine. \$250 or swap for 129 Cord, Auburn, Airflow, etc. M. Watson, 603 Front St., Georgetown, S.C.

WANTED—'32 V-12 Packard Victoria by Dietrich, running or not, but with all parts intact, within 1000 miles of San Francisco. Moore, Box 489, San Francisco, Calif.

SELL—McCulloch supercharger, new set of Ardun overheads, new set of Grancor flatheads, Weber road grind cam and aluminum flywheel for Ford or Mercury. R. Hartman, 720 Aurora Rd., Lancaster, N.Y.

WANTED—Kurtis sports car, Jaguar XK 120, '37 Cord supercharged conv. in western states. Give details, price and photos. V. J. Remy, 409 Buena Vista Dr., El Paso, Tex.

SELL OR SWAP—'32 Lincoln V-8 seven-pass. sedan. Excellent condition, mechanically and otherwise. Interior, finish, original. Mileage 52,000. \$600, but would prefer trade for open classic car in comparable condition. R. B. Miller, 4674 Dolores Ave., Oakland 2, Calif.

WANTED—Heavy duty front and rear bumpers for '48 Chevrolet conv. Must have two exhaust ports in rear bumper. F. Snyder, Box 1476, Albany, N.Y.

WANTED—'35 to '40 Ford phaeton or roadster. Body in good condition with side curtains, vicinity Chicago. R. C. Lindberg, 209 S. La Salle St., Chicago 4, Ill.

WANTED—Crankshaft and connecting rod for a 10 hp Stanley engine or a complete engine. Also a 20 hp White steam car engine. F. A. Bues, 331 W. Doran St., Glendale 3, Calif.

WANTED—A set of 32 x 4 or 33 x 4 wood wheels with either quick detachable or demountable rims. Hubs not important. F. A. Bues, 331 W. Doran St., Glendale 3, Calif.

WANTED—D. O. Cragar cylinder head not broached or welded. Send accurate description and price. T. King, 941 Geary St., San Francisco, Calif.

WANTED—One hood ornament for '35 Fleetwood V-12 Cadillac, also would like original hub caps and wheel covers (discs). Will pay any reasonable amount. W. H. Miller, 118 S. Grand Ave., Baldwin, N.Y.

SELL OR SWAP—'25 Cleveland sedan very clean and solid, ready, able; price \$125 or trade for roadster of the twenties, same condition. V. Johnson, 738 College Ave. SE, Grand Rapids, Mich.

SELL—Used Edmunds' dual intake manifold EBL-3 Buick 60-70-90, '46 to '50, Edmunds heads ECH-20 '36-'48 Cadillac, ECB-1R dual intake manifold. P. L. Taylor, 3916 12th Ave. So., Minneapolis 7, Minn.

WANTED—Rolls-Royce with low mileage. Conv. coupe or sedan preferred. Send price, other information first letter. C. C. Wohlwend Jr., Rt. 10, Knoxville, Tenn.

SELL—'21 in. Chevrolet engine, Edelbrock dual manifold Rochester carbs, H.C. 3/4 cam, aluminum pistons, stock head. Not run since major overhaul. Aluminum valve cover. \$200. F. H. Wilson, 279 Thayer St., Providence, R. I.

WANTED—V-8 60 high compression heads, dual carb, intake aluminum flywheel, double coil distributor or magneto, eight semi racing pistons etc. All may be used, reasonable. W. M. Rowland, Leonardtown, Md.

WANTED—Original Flying Goddess radiator cap emblem for '31 Cadillac. M. M. Henkels, 33 Greenwood Rd., Wellesley Hills, Mass.

WANTED—Old Lincoln, any model up to '31, must be in good condition. No junkers please. L. S. Balbach, Ward Ave., Rumson, N.J.

SWAP—'50 Hudson Commodore six four-door in excellent condition for Cord, Jaguar, or Lincoln Continental in good condition. Send particulars. L. Sgro, 390 W. Market St., Warren, Ohio.

WANTED—Complete set of original Cord hub caps in excellent or easily restorable condition. E. Sharp, 220 Sullivan St., New York 12, N.Y.

SELL OR SWAP—'40 Packard Darrin five-passenger conv. Victoria, beautiful condition, new top, paint. \$2000 cash or trade for Cadillac or European sports car. P. C. DeBernardis, 524 N. Salina St., Syracuse, N.Y.

SELL—New Italmecanica blower with everything complete to fit a '50 or '51 Ford and Mercury passenger cars. Write or phone J. Kesser, 1328 Union St., Union, Ohio. Phone 116.

SELL—'39 Buick Roadmaster semi-classic four-door sedan. Jet black original and excellent throughout. Whitewall tires, fender wells, photos on request. \$300. R. Wolf, Rt. 3, Box 799, Hamburg, N.Y.

SELL—Pierce-Arrow '29 limousine, 7000 actual miles, original except battery, tires. Blue and black paint good. Well worth \$275. L. L. Lacer, 219 N. Jefferson, Junction City, Kans.

WANTED—Tires and tubes for antique cars: 34 x 4, 35 x 4 1/2, 33 x 4, 34 x 4 1/2. B. H. Atchley, Loudon, Tenn.

WANTED—Set center-lock wire wheels preferably 16 in. and hubs. Must be good and adaptable to Ford or '39 Lincoln Zephyr spindles and axles. W. R. Houk, 816 N. Broadview, Wichita, Kans.

WANTED—Auburn speedster, good or repairable condition and whether supercharged or not. Photos if possible. C. M. Rust, 2751 Evelyn Ave., Wilmot, Calif.

WANTED—Chevrolet hi-torque or GMC engine suitable for rebuilding. Must have a good crank-shaft. Will accept a hopped-up engine if priced reasonably. H. Olson, Heron Lake, Minn.

SELL—Model T Ford parts, over 200 items all new. All different, no fenders, no brass lights. If no answer I don't have it. F. T. Snyder, 321 Union St., Hackensack, N.J.

SELL—'37 Cord engine, will sell heads, block, or any part, transmission case, gears, joints, wheels, hoods, doors, deck lids, Beverly sedan, stripped, make offer. D. White, 1325 Fruitvale Ave., Oakland, Calif.

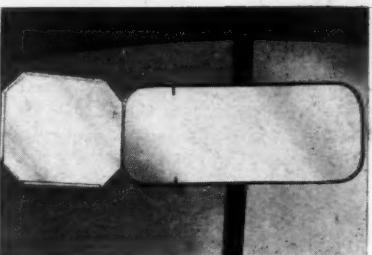
SELL—'32 Packard eight sedan, excellent condition, good tires. \$175. C. C. Hiser, 1426 Wells St., Fort Wayne 7, Ind.

SELL—'34 Plymouth I.F.S. including cross-member, same as used on Seely's Cannonball sports car, \$95. '39 Graham rear end \$25. Everything new condition. G. D. Knudsen, 2217 Cuming, Omaha, Neb.

SELL—'41 Graham engine with B.W. overdrive transmission; '51 Kaiser pistons and rods, supercharged; complete with accessories. Everything new condition. Ready to run. \$350. G. D. Knudsen, 2217 Cuming St., Omaha, Neb.

SELL—New T Ford parts; windshield wiper blades, '35-'39 '14 front license plate brackets, .50c; '26-'27 pedal pads, sets, \$1.25; adjustable tie rod end sets, \$1.25; starter springs, .60c; front belt guides, .75c. All parts postpaid. G. M. Fitz-Gerald, 410 Willy Hwy. V.V.M., Burlington, Vt.

WANTED—'27 or '28 Super Eight Packard complete or parts for same located on east or west coast. R. Fairbank, Box 67, Morro Bay, Calif.



NEW! RIGHT-VIEW SAFETY MIRROR

SEE any car on your immediate right rear. KNOW when it is SAFE to cross into the right traffic lane without danger of an accident. RIGHT-VIEW safety mirror clips on rear view mirror in a jiffy, focuses to right rear thru side window. Eliminates that blind spot. Made of high quality aluminum, attractive baked enamel finish. No-glare glass. Only \$2 ppd. tax incl. Use for 15 days. Satisfaction or money back.

RIGHT-VIEW MIRROR CO.
74 Southern Heights Blvd. San Rafael, Calif.

International Motors . . .

features

the finest in foreign car
SALES AND SERVICE

• • •

SPECIALIZED EQUIPMENT
AND ACCESSORIES

FOR YOUR SPORTS CAR

WADE—England's finest Supercharger for the MG, \$395 plus taxes.

ABARTH—Dual Manifolds for Simco (includes carburetors) \$175 plus taxes.

AUTOCCESSORIES—The complete specialty line for MG.

INTERNATIONAL MOTORS, INC.

5670 Sunset Blvd., Hollywood, Calif.

NE 3145

WE DON'T BELIEVE IN GLOATING BUT


With others bemoaning the decline in sales we are faced with the problem of increasing production. We take justifiable pride and satisfaction in the ever increasing popularity of Iskenderian Cams. For tops in performance you can't beat the Iskenderian Cam.

COMPLETE BOOKLET ON RACING CAMS . . . ONLY 25¢

ED ISKENDERIAN 6225 Slauson Ave.
Culver City, Calif.

FRED BODLEY

Precision Repairing . . . Rolls Royce,
Bentley & all Foreign Automobiles.

8515 W. Pico Blvd., Los Angeles, Calif.

Crestview 5-1557

SPEEDWAY TO ROADWAY!

Now—Give your passenger car, old or new, exciting Race Track performance with amazing new track-proven Hi-Speed Heads and dust Manifold instant acceleration at any speed; surging reserve power!

ASTOUNDING GATEWAY! INCREASE POWER 30%
Install yourself—no special tools needed. Easy instructions show every step. Guaranteed on our risk! Get the thrilling facts.

Send for Your Copy of FREE CATALOG TODAY

SPEEDSPORT 4866-T Milwaukee
Chicago 30, Ill.

DEALERS
WANTED

Any Model, Tailor Made

HEADLINERS \$12.50

(for Car Ceiling)

send sample material. Head-

liner if possible.

Orders Shipped
SAME DAY RECEIVED

OLIE AUTO TOP

Dept. MT-254, 6201 Famous St., St. Louis 10, Mo.

Forty-nine

TRADE TOPICS

ANYONE IN THE HOUSE who doesn't like leather . . . the smell, the feel and the looks of it? Get thee hence to the next paragraph, brother—this is not for you. It concerns a leather conditioner and the guy who knows more about leather than anybody in this business. The guy is Dale Runyan who has made his fame in custom upholstering and tops; the conditioner is actually two products—Jasun's Leather Cleaner and Jasun's Leather Lotion—made expressly for Runyan. The Cleaner is composed principally of protein and organic oil and contains none of the soap or detergents of other cleaners which vitiate the leather; it has high foaming properties and the ability to hold soil in suspension thus insuring absolute cleansing of surface soil. The Lotion is formulated of the necessary organic oils required for the effective preservation and restoration of leather, and contains the famous sunscreen, Escalol, which retards cracking and fading. To keep leather alive and fresh and pliable—whether it's the upholstery on the Cad, Aunt Hepzibah's portmanteau or the extremities of Fenimore Cooper's boys (in case any of 'em are still kicking around)—the slick answer is Jasun's. Write RUNYAN, 7966 Santa Monica Blvd., Los Angeles, if you would save your hide.

★ ★ ★

THE INVENTOR-MANUFACTURER of a truly sound innovation in automotive accessories has taken a page from the copywriter's book! He has written his own dialogue, leaving no room for smart-talk comment. He is Jeff Corydon II, president of Hush Bumpers, Inc., 2332 Logan Blvd., Chicago, Illinois—



shown here explaining the safety air cushion principle of his new "BUMP-AIR" GUARDS. Mr. Corydon says: "For years, motorists and truck drivers have enjoyed the benefits of inflated tires and shock absorbers . . . up to now, however, nothing has been done to take the bump out of bumpers. The logical answer is inflated guards instead of those made of metal. Our slogan is 'Bump-Air—not steel.' These guards, molded of rubber or poly-vinyl-chloride, are durable and resilient, and provide the flexibility that absorbs chassis and passenger shock. Thanks, Mr. Corydon, for an idea with bounce, and good copy too!

A CANADIAN FACE-LIFT FOR YOUR FORD

SCIENCE DE-BUMPS YOUR BUMPERS

MILL RIVER BACKS ITS "MOLY"

BY ROLLIN MACK

NUMBERED AMONG OUR OLDEST friends and advertisers is Alex Kraus of EASTERN AUTO SUPPLY, who this month brings out a CUSTOM GRILLE CONVERSION for 1950-51 Fords. This Ford Grille Bar, designed to give that expensive "Big Car" look, is of heavily chromed twenty gauge steel and extends inward fully 7½ inches. It replaces the complete center bar on the '51 without alteration. New top molding and hood conversion is required on '50 models. This looks like a good deal at \$19.95. The place: EASTERN AUTO SUPPLY, 3319 S. Grand Avenue, Los Angeles 7.

★ ★ ★

AND HERE, IN CASE you can't identify it,



is a "RAIN-BO" Traffic Light Indicator and Blind Hill Viewer. Here is the story on RAIN-BO: Made of golden Lucite, this uniquely designed indicator enables drivers of cars with visors to spot high traffic lights regardless of location. It also doubles as a blind-hill viewer, enabling driver to spot oncoming cars in steep dips. Mounts quickly with two suction cups on top of dash cowl. Manufactured by the Products Division, APOLLO AD SERVICE, INC., York, Pa. The price is \$2.00 postpaid. Climbed any blind hills lately?

★ ★ ★

NOTE ON INDUSTRIAL MORALITY 1952. Our editors are planning an Accessory Trial in the near future on "AUTO-LIQUI-MOLY" under a unique arrangement with its manufacturer, MILL RIVER PRODUCTS, INC. If the tests are unsatisfactory, and the results are confirmed by a subsequent testing under Mill River direction to insure fair trial, the company will take the product off the market and allow publication of full details of the trial. It seems to me that a company ready and willing to put its integrity on the line has the right kind of foundation to build a towering success. About their product: LIQUI-MOLY is a lubricant based on the magic metal, Molybdenum. The makers claim a principle new to the science of lubrication—the lubricating element is actually an extremely finely divided dry solid, suspended

in a compatible liquid so that it looks and can be handled like any conventional oil. It is poured into the crankcase and carried to the bearing surfaces in the flow of oil, where it "plates out" on the working surfaces, and is so firmly held there by molecular attraction that it can only be completely removed by grinding it off. This "Moly" film cannot be "squeezed out" by any amount of pressure or heat, and the bearing surfaces are consequently protected even in the event of an accidental loss of all the oil or radiator water. "Moly" has had widespread use in atomic energy plants, jet engine manufacture, and has proved invaluable as a lubricant in stamping and drawing operations in heavy industry. Mill River claims for its product: An increase in rpm, better pickup, longer bearing life, more efficient break-in of new engines, and, of course, the stand-by protection in the event of failure of the lubrication or cooling systems. Full details on "Moly" can be obtained from MILL RIVER PRODUCTS, INC., 123 Middle Neck Road, Great Neck, New York. And . . . you'll be seeing more about "Moly" in MOTOR TREND.

★ ★ ★

INDIRECT LIGHTING is the noteworthy feature of the latest deluxe MILE-O-METER from our old friend, GALE HALL ENGINEERING of 236 Huntington Avenue, Boston, Massachusetts. Gale Hall is using a special plastic paint in the new meter, and has engineered the lighting so that there are no light fringes to glare in the driver's eyes. Interesting also to note that the improved product sells for the same old price of \$14.95.

★ ★ ★

OUR CANADIAN COUSINS are about to introduce in this country the grille which will change the face of your 1951 Ford . . . giving



the car a lower, wider look; custom distinction and the appearance of a Big Car! This conversion kit (shown above) is simply installed . . . no chopping or refitting required . . . and is itself a genuine Ford product, manufactured in Canada . . . and priced at \$59.50 F.O.B. St. Boniface. For full information on this handsome face, write W & W SERVICE INDUSTRIES, 875 Tache Avenue, St. Boniface, Canada.

A MUFFLER FOR EVERY CAR

Douglass
STEEL PACKED

MERCURY



FORD V-8



OLDSMOBILE

CHEVROLET



LINCOLN



FORD V-8



FORD TRUCKS F-1



Fully Guaranteed

AT YOUR DEALER OR ORDER DIRECT—IMMEDIATE DELIVERY

Deep, mellow, dual tone! Straight-Thru type . . . Cuts back pressure up to 50% giving your car added power and acceleration! Saves your engine! Steel-packed, seamless steel tube construction! Won't rust out! Outlasts 3 to 5 ordinary mufflers! Easy to install, fits same space your present muffler is in!

Chev. 29-51, Ford 32-40, Ply. 31-41, Willys.....	\$6.86
Ford 41-51, Merc. 39-48.....	\$7.20
Chry. 6 Cyl., DeSoto, Dodge.....	\$7.90
Lafayette, Ply. 42-51, Stude. Comm., Terraplane.....	\$7.90
Buicks, Hudson 6 & 8 Cyl., Kaiser, Frazer, Olds 6 & 8 Cyl.....	\$8.28
Merc. 49-51, Nash, Pontiac, LaSalle 34-38.....	\$8.28
Cadillac, Chry. 8 Cyl., Ford Mod. A. Assembly 29-31.....	\$9.15
LaSalle 39-40, Lincoln Zephyr, Continental, Cosmopolitan, Packard.....	\$9.15

(Note: Where no year is shown all year models are same price.)

BALANCED EXHAUST SYSTEM

by Douglass

A PERFECT FIT GUARANTEED — No cutting or welding for installation on 1935 to 1949-51 Ford V-8 Cpe. or Sedan, however it is necessary to cut a hole for the 49-51 Mercury and some 49-51 Ford convertibles and station wagons. Balanced exhaust system includes one pair of headers, one pair of extensions (i), two DOUGLASS Steel Pack Dual Tone Mufflers, left side tail pipe, all bolts, clamps and complete instructions. One of the most complete kits in the market. For 35-51 Ford, 39-51 Merc. **ONLY \$52.50.** Oldsmobile \$50. Cadillac, Lincolns—write for complete price list. (State, model and type of transmission.) \$15.00 C.O.D. deposit on this item.

Dealer Inquiries Invited

10 DAY FREE TRIAL • MONEY BACK GUARANTEE

Please send at once

4-MT

- Douglass "Steel Packed" muffler Douglass Dual Set
 Douglass Balanced Exhaust System for a

SPECIFY YEAR, MAKE & MODEL OF CAR

TYPE OF TRANSMISSION

- Check or money order in full, enclosed
 C.O.D. Deposit for \$_____ Balance to be paid on delivery.

Name _____

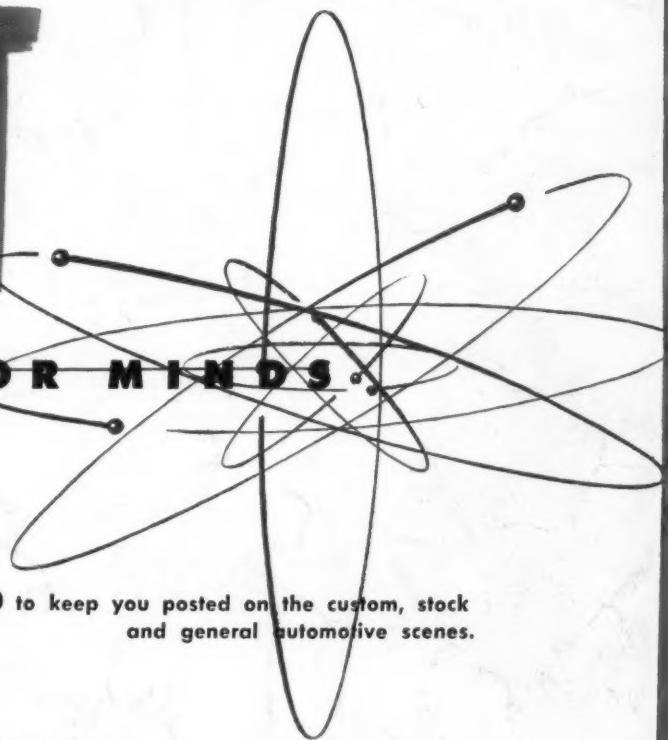
Street Address _____

City _____ Zone _____ State _____

O.
MT

BALANCED DIET

FOR MOTOR MINDS.



MOTOR TREND to keep you posted on the custom, stock and general automotive scenes.



HOT ROD MAGAZINE to cover the hot rods and young American creative picture.



CYCLE to spotlight the highlights of motorcycle achievement.



AUTO to give you the complete story on foreign and sports car activity.

THESE are all the motoring vitamins you need for full understanding and a ciation of what goes on in the motor world. Young or old, driver or arm scientist, there's a Trend publication for every motoring interest. And who than Trend, which covers all the motoring field, can speak with authority phase of that field! The Trend magazines are ALL on your favorite newsstan

